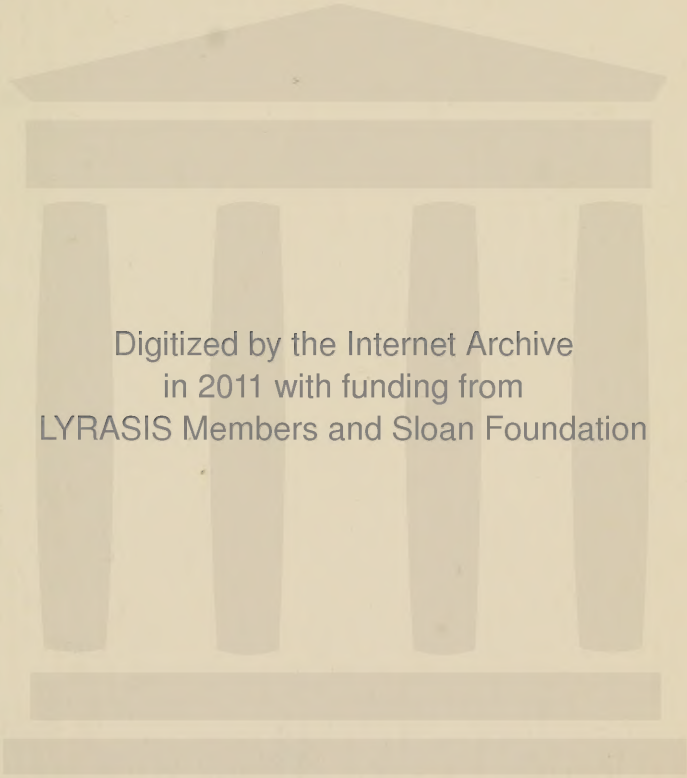
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Baltimore. Mayor.

— THE —

MAYOR'S MESSAGE

— AND —

REPORTS OF THE CITY OFFICERS

— MADE TO THE —

CITY COUNCIL OF BALTIMORE

FOR THE YEAR 1893.

PART II.

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ANNUAL REPORT

OF THE

DEPARTMENT OF STREET CLEANING

OF THE

CITY OF BALTIMORE,

TO THE

MAYOR AND CITY COUNCIL OF BALTIMORE,

FOR THE

FISCAL YEAR ENDING DECEMBER 31, 1893.

OFFICERS AND EMPLOYEES

— OF THE —

Department of Street Cleaning,

FOR THE YEAR 1893.

B. E. SMITH,

Commissioner of Street Cleaning.

JOHN J. WALSH,

Clerk.

Superintendents of Streets:

GEORGE W. TRUMBO, *1st District.*
G. E. MCCAULEY, *2d District,*
MICHAEL FADGEN, *3d District.*
JAMES F. BUSEY, *4th District.*
H. LANCASTER, *5th District.*
JOHN MEAGHER, *6th District.*
JOSEPH MCGEE, *7th District.*

Superintendents of Dumps:

JOHN HUGHES, *Canton.*
F. P. QUINN, *Back Basin.*
LOUIS S. FEFEL, *Spring Garden.*
THOMAS J. CROPPER, *Eager Street.*
MATTHEW J. RUDOLPH, *South Baltimore.*

REPORT.

DEPARTMENT OF STREET CLEANING—CITY HALL,

BALTIMORE, January 3, 1894.

To the Honorable the Mayor and
City Council of Baltimore :

GENTLEMEN :

In compliance with provisions of Ordinance No. 6, approved February 21, 1882, I have the honor to submit herewith the report of the Department of Street Cleaning.

The annexed tables show the number of men and carts employed, the work performed by the department during the year, the money expended, and the amount received for refuse, etc.

The total appropriation for the year was three hundred and seventy thousand and eighty-six dollars; and the amount expended, three hundred and fifty-nine thousand eight hundred and ninety-six dollars and ninety-one cents, leaving a balance of ten thousand one hundred and eighty-nine dollars and nine cents.

Under Resolution No. 3, approved January 24, 1893,

appropriating fifty thousand dollars to remove ice and snow and to clean the streets, empowering the Commissioner to employ the necessary force, the Commissioner promptly organized extra gangs and commenced work in the centre of the city, and continued the same until February 28, when all obstruction from this cause to ordinary travel had been removed at a cost of thirty-eight thousand three hundred and five dollars and thirty-three cents. At springtime the accumulation of filth and dirt on the streets and alleys was very heavy, owing to the severity of the winter season, and it was determined to use the unexpended balance of this appropriation to aid the regular force in putting the city in proper condition for the approaching summer. This was done, and I respectfully refer you to table G for the detailed statement of force employed, work performed, tools purchased, and money expended. In accordance with my suggestion in last year's report, the number of machines was increased from four to six sweepers, and two to five sprinklers. The supposition when these machines were first introduced was that their work would be effectual only on smooth pavements, but experience has proven that they are equally useful on the cobble-stone pavements, when the same are in good condition, and the results during the past year have been such as to induce me to ask that means be provided to increase the number to ten sweepers. The necessity for this increase will be apparent when it is known that four and five machines are employed

at night in the central portions of the city, where profitable work can be done only at this time on account of the great traffic during the business hours of the day, after which they need cleaning and overhauling; therefore they are not available for day work in other sections of the city. Hence, to avoid delay and interruption, the number should be increased.

The department now employs one hundred and fourty-four sweepers and scrapers, sixty-four carts, six sweeping machines, five sprinklers and one hundred and fifty-five garbage carts. The sweepers and scrapers are paid ten dollars, and the owners and drivers of the carts eighteen dollars per week. The sweeping machines and sprinklers are supplied with drivers, horses and harness by Henry Magness, under contract, at the rate of $3.44 per day for the machines, and $2.14 for the sprinklers. The cost this year for this work was, including the purchase of the machines, $8,612.72.

In addition to the sweeping machines and sprinklers, I would recommend the organization of a separate corps of men to clean the markets. There are eleven markets in the city which have to be cleaned three times a week, and the men at present are withdrawn from the streets to clean them, thus consuming about one-third of the time of the entire force, thus necessitating the suspension of the work of the machines. The force that would be required for this purpose would be a superintendent, twenty-five men and twelve carts, and

would be an additional expense of about $25,000 per annum. I believe, however, this would be money well expended, as the work of the regular force would be uninterrupted.

With the adoption of these recommendations and the enforcement of Ordinance No. 46, approved March 22d, 1893, entitled "An ordinance to prohibit the throwing of rubbish in the streets or on the sidewalks of the city," the streets could be kept in better condition. For a few weeks after the publication of the passage of this ordinance it was noticeable that there was less distribution of waste paper and rubbish on the street, but the ordinance now seems to be overlooked, and the people to have relapsed into their former habit of sweeping the store rubbish and throwing the waste paper and litter into the streets, and then blaming the department for their dirty condition; it is impossible to keep the city clean unless the people unite with us in our efforts. For those who continually and habitually violate the law in this respect, there should be a vigorous enforcement of the ordinance and an imposition of the penalty prescribed.

During the past, as well as in previous years, a heavy addition has been made to our work in having to remove the large quantities of sand left by the contractors on streets after having been paved or repaved. I think a proviso should be inserted in the contracts requiring them to remove this after it has remained a sufficient

time to effect its purpose, as it seems to me that this is justly a part of their work.

Last year I referred briefly to the condition of many of the alleys, but this is now a matter of such importance to the health and comfort of our citizens that it requires more than a passing notice. For the convenience of the residents, in many cases, the alleys are laid out in the rear of a row of houses, and after having been paved carelessly with cobble-stones, without proper foundation, in a short time are formed on each side ruts deeper than the original gutter, forming holes in which the foul water stagnates, from which arise disagreeable and unhealthy odors. It is impossible to keep such alleys clean, as but a short time elapses after cleaning when they are as bad as before. But little can be done to remedy the condition of those already in use; but there should be passed an ordinance compelling owners in making the divisions of lots to provide that such alleys should run through the entire lot from street to street, and have them paved smoothly and in a substantial manner.

During the past year there have been comparatively few complaints from the garbage service, and some of these, upon investigation, proved to be the fault of the housekeepers not having separated the offal from the ashes, or of demanding the man to remove matter not defined in the law. The ordinance requires the collector

"to remove coal or other ashes and kitchen offal when put in vessels not exceeding one bushel in capacity, and placed near their premises accessible to the carts," and not, as some seem to suppose, to take every form of rubbish which may accumulate on their premises. It has been suggested by some that garbage be collected at night; but if they knew that nine-tenths of the garbage and ashes collected in this city is taken from the rear of the premises, the gate being left unfastened for this purpose, they would readily perceive that the suggestion is unwise, as no one would leave their property thus unsecured at night.

For this service iron carts such as are used in New York should be secured.

The contract for the removal of garbage from the city will expire on the first of July, 1894. As the present system of removal is expensive by reason of the long distance of the haul to reach the scows on the water side of the city, as well as the objection on account of its being very offensive and unhealthy, some one of the improved methods for its disposal now so successfully operated in other cities should be adopted.

As in former reports I again invite your attention to the fact that the Commissioner is held responsible for the working of the department when he has not the power of employing the men to perform the service, and would recommend that this power be conferred, as

only thus can discipline be enforced and efficiency secured. To do this will be a great step taken to secure more beneficial results for the money expended.

On the first of July, 1891, a contract was made with M. W. Adams for the removal of garbage from the city for the sum of nine thousand five hundred dollars per annum for three years; no provision has been made for the payment of the amount for this service for the six months ending December 31st, 1893.

In June proposals for the purchase of street dirt were advertised for, but none were received.

From the sale of this, during the year, the department has received and turned over to the Comptroller seven hundred and eighty-four dollars and twenty cents ($784.20).

In conclusion, I return thanks to the superintendents for their earnest co-operation in the working of the department.

The following is an estimate of expenses for the year 1894:

141 Garbage carts and men at $18 per week.	$132,076 00
76 Street carts and men at $18 per week..	71,136 00
159 Sweepers and scrapers at $10 per week.	82,680 00
Salaries	9,000 00
Amount carried forward.....	$294,892 00

Amount brought forward	$294,892 00
Dumps	5,100 00
Tools, including machines, sprinklers, hire of horses, stable rent, repairs to machines, etc.	13,716 00
	$313,708 00
Contract for removal of garbage from the city	$9,500 00

CITY ANNEX.

14 Garbage carts and men at $18 per week	$13,104 00
6 Street carts and men at $18 per week	5,616 00
12 Sweepers and scrapers at $10 per week	6,240 00
Salary of superintendent	1,000 00
Tools	125 00
	$26,085 00

Respectfully submitted,

B. E. SMITH,

Commissioner of Street Cleaning.

TABLES.

TABLE A.

Weekly Report showing amount of work done in the Street Cleaning Department, the number of men and carts employed in the several Districts, and the amount of money expended for the same, from January 1 to December 31, 1893.

FIRST DISTRICT. B. V. KELLY, Superintendent.	Garbage and Ashes Removed.	Street Dirt, Sand, etc., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, etc.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending January 9	765	768	$342 00	$374 00	19	8	23	1533	$716 00
" " 16	763	768	342 00	420 83	19	8	23	1531	762 83
" " 23	727	1120	342 00	431 33	19	8	23	1847	773 33
" " 30	763	768	342 00	374 00	19	8	23	1531	716 00
	3018	3424	$1368 00	$1600 16	.....	.....	.....	6442	$2968 16
Week ending February 6	767	912	$342 00	$374 00	19	8	23	1679	$716 00
" " 13	757	912	342 00	374 00	19	8	23	1669	716 00
" " 20	771	912	342 00	374 00	19	8	23	1683	716 00
" " 27	761	1008	342 00	379 20	19	8	23	1769	721 20
	3056	3744	$1368 00	$1501 20	.....	.....	.....	6800	$2869 20

Week ending March 6	771	816	$342 00	$374 00	19	8	23	1587	$716 00
" " 13	760	776	342 00	374 00	19	8	23	1536	716 00
" " 20	768	736	342 00	374 00	19	8	23	1504	716 00
" " 27	778	432	342 00	374 00	19	8	23	1210	716 00
	3077	2760	$1368 00	$1496 00	.....	.....	.....	5837	$2864 00
Week ending April 3	774	736	$342 00	$374 00	19	8	23	1510	$716 00
" " 10	774	576	342 00	374 00	19	8	23	1350	716 00
" " 17	716	400	342 00	374 00	19	8	23	1116	716 00
" " 24	908	576	342 00	374 00	19	8	23	1484	716 00
	3172	2288	$1368 00	$1496 00	.....	.....	.....	5460	$2864 00
Week ending May 1	818	468	$342 00	$374 00	19	8	23	1286	$716 00
" " 8	855	640	342 00	374 00	19	8	23	1495	716 00
" " 15	668	384	342 00	374 00	19	8	23	1052	716 00
" " 22	682	576	342 00	274 00	19	8	23	1258	716 00
" " 29	654	576	342 00	374 00	19	8	23	1230	716 00
	3677	2644	$1710 00	$1870 00	.....	.....	.....	6321	$3580 00
Week ending June 5	657	576	$342 00	$374 00	19	8	23	1233	$716 00
" " 12	696	720	342 00	374 00	19	8	23	1416	716 00
" " 19	694	576	342 00	374 00	19	8	23	1270	716 00
" " 26	627	381	342 00	374 00	19	8	23	1008	716 00
	2674	2253	$1368 00	$1496 00	.....	.....	.....	4927	$2864 00

TABLE A—Continued.

FIRST DISTRICT. GEORGE W. TRUMBO, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, etc., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, etc.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending July 3	631	384	$ 342 00	$ 374 00	19	8	23	1015	$ 716 00
" " 10	629	389	342 00	374 00	19	8	23	1018	716 00
" " 17	639	386	342 00	374 00	19	8	23	1025	716 00
" " 24	648	358	342 00	374 00	19	8	23	1006	716 00
" " 31	610	385	342 00	370 67	19	8	23	995	712 67
	3157	1902	$1710 00	$1866 67	.....	.....	.....	5059	$3576 67
Week ending August 7	623	365	$ 342 00	$ 374 00	19	8	23	988	$ 716 00
" " 14	631	381	342 00	374 00	19	8	23	1012	716 00
" " 21	628	389	342 00	374 00	19	8	23	1017	716 00
" " 28	611	374	342 00	374 00	19	8	23	985	716 00
	2493	1509	$1368 00	$1496 00	.....	.....	.....	4002	$2864 00

Week ending September 4.....	544	617	$ 342 00	$ 429 54	19	8	23	1161	$ 771 54
" " 11.....	636	377	342 00	374 00	19	8	23	1013	716 00
" " 18.....	638	380	342 00	374 00	19	8	23	1018	716 00
" " 25.....	627	379	342 00	374 00	19	8	23	1006	716 00
	2445	1753	$1368 00	$1551 54	.....	.....	.....	4198	$2919 54
Week ending October 2.....	628	373	$ 342 00	$ 374 00	19	8	23	1001	$ 716 00
" " 9.....	595	367	342 00	372 33	19	8	23	962	714 33
" " 16	583	372	342 00	374 00	19	8	23	955	716 00
" " 23.....	617	376	342 00	374 00	19	8	23	993	716 00
" " 30.....	637	387	342 00	374 00	19	8	23	1024	716 00
	3060	1875	$1710 00	$1868 33	.....	.....	.....	4935	$3578 33
Week ending November 6.....	634	369	$ 342 00	$ 374 00	19	8	23	1003	$ 716 00
" " 13.....	589	390	342 00	374 00	19	8	23	979	716 00
" " 20.....	589	358	342 00	382 33	19	8	23	947	724 33
" " 27.....	589	336	342 00	377 33	19	8	24	925	719 33
	2401	1453	$1368 00	$1507 66	.....	.....	.....	3854	$2875 66

TABLE A—Continued.

FIRST DISTRICT. GEORGE W. TRUMBO, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, etc., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, etc.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending December 4.....	570	336	$ 342 00	$ 384 00	19	8	24	906	$ 726 00
" " 11..	589	368	342 00	374 83	19	8	24	957	716 83
" " 18.....	589	360	342 00	379 82	19	8	24	949	721 82
" " 25.....	589	347	342 00	384 00	19	8	24	936	726 00
" " 30.....	570	320	342 00	384 00	19	8	24	890	726 00
	2907	1731	$1710 00	$1906 65	.....	.....	.....	4638	$3616 65

SECOND DISTRICT.

GEORGE E. McCAULEY, Sup't.

Week ending January 10	749	722	$450 00	$376 82	25	10	22	1471	$826 82
" " 17	746	803	450 00	432 03	25	10	22	1549	882 03
" " 24	766	932	450 00	537 59	25	10	22	1698	987 59
" " 31	778	974	450 00	514 44	25	10	22	1752	964 44
	3039	3431	$1800 00	$1860 88	.....	.....	.....	6470	$3660 88
Week ending February 7	797	743	$450 00	$410 14	25	10	23	1540	$860 14
" " 14	746	812	450 00	390 64	25	10	22	1558	840 64
" " 21	746	1026	450 00	394 15	25	10	23	1772	844 15
" " 28	700	974	450 00	409 34	25	10	22	1674	859 34
	2989	3555	$1800 00	$1604 27	.....	.....	.....	6544	$3404 27
Week ending March 7	722	983	$450 00	$419 29	25	10	22	1705	$869 29
" " 14	797	977	444 00	386 82	25	10	22	1774	830 82
" " 21	746	861	450 00	399 16	25	10	22	1607	849 16
" " 28	700	896	450 00	394 16	25	10	22	1596	844 16
	2965	3717	$1794 00	$1599 43	.....	.....	.....	6682	$3393 43

TABLE A—Continued.

SECOND DISTRICT. GEORGE E. McCAULEY, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, etc., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, etc.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending April 4	797	905	$447 00	$398 00	25	10	22	1702	$845 00
" " 11	816	974	450 00	395 14	25	10	22	1790	845 14
" " 18	824	944	450 00	376 38	25	10	22	1768	826 38
" " 25	797	934	450 00	399 16	25	10	22	1731	849 16
	3234	3757	$1797 00	$1568 68	.....	.....	.....	6991	$3365 68
Week ending May 2	775	952	$450 00	$395 81	25	10	22	1727	$845 81
" " 9	872	995	450 00	393 33	25	10	22	1867	843 33
" " 16	824	938	450 00	395 83	25	10	22	1762	845 83
" " 23	824	926	450 00	395 83	25	10	22	1750	845 83
" " 30	797	969	450 00	397 49	25	10	22	1766	847 49
	4092	4780	$2250 00	$1978 29	.....	.....	.....	8872	$4228 29

Week ending June 6	872	944	$450 00	$400 00	25	10	22	1816	$850 00
" " 13	822	962	438 00	398 33	25	10	22	1784	836 33
" " 20	821	1097	441 00	418 65	25	13	23	1918	859 65
" " 27	775	1074	450 00	407 15	25	11	22	1849	857 15
	3290	4077	$1779 00	$1624 13				7367	$3403 13
Week ending July 4	872	1026	$450 00	$417 99	25	12	23	1898	$867 99
" " 11	775	901	441 00	424 49	25	12	23	1676	865 49
" " 18	522	982	435 00	425 32	25	12	23	1504	860 32
" " 25	647	862	450 00	419 65	25	11	23	1509	869 65
	2816	3771	$1776 00	$1687 45				6587	$3463 45
Week ending August 1	657	753	$468 00	$398 49	26	10	23	1410	$866 49
" " 8	662	869	459 00	414 98	26	11	23	1531	873 98
" " 15	716	795	468 00	399 98	26	10	23	1511	867 98
" " 22	1156	823	468 00	408 98	26	11	23	1979	876 98
" " 29	773	812	468 00	400 49	26	11	23	1585	868 49
	3964	4052	$2331 00	$2022 92				8016	$4353 92

TABLE A—Continued.

SECOND DISTRICT. GEORGE E. McCAULEY, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, etc., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, etc.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Hauled.	Total Amount of Expenditures.
Week ending September 5.....	741	802	$468 00	$405 99	26	11	23	1543	$873 99
" " 12.....	742	785	468 00	404 31	26	11	23	1527	872 31
" " 19.....	703	798	468 00	398 47	26	11	23	1501	866 47
" " 26.....	729	781	468 00	402 98	26	11	23	1510	870 98
	2915	3166	$1872 00	$1611 75	.....	.....	.....	6081	$3483 75
Week ending October 3.....	964	793	$468 00	$405 98	26	11	23	1757	$873 98
" " 10.....	926	791	468 00	401 31	26	11	23	1717	869 31
" " 17.....	950	812	468 00	406 65	26	11	23	1762	874 65
" " 24.....	875	811	468 00	399 98	26	10	23	1686	867 98
" " 31.....	854	788	468 00	400 82	26	10	23	1642	868 82
	4569	3995	$2340 00	$2014 74	.....	.....	.....	8564	$4354 74

Week ending November 7	852	793	$468 00	$403 32	26	10	23	1645	$871 32
" " 14	827	795	468 00	399 99	26	10	23	1622	867 99
" " 21	852	811	468 00	401 66	26	10	23	1663	869 66
" " 28	727	813	468 00	400 00	26	10	22	1540	868 00
	3258	3212	$1872 00	$1604 97	.....	.....	.....	6470	$3476 97
Week ending December 5	741	788	$468 00	$398 49	26	10	23	1529	$866 49
" " 12	760	786	468 00	382 75	26	10	22	1546	850 75
" " 19	964	789	468 00	394 64	26	10	23	1753	862 64
" " 26	883	790	468 00	399 99	26	10	23	1673	867 99
" " 30	915	793	468 00	399 98	26	10	23	1708	867 98
	4263	3946	$2340 00	$1975 85	.....	.....	.....	8209	$4315 85

TABLE A—Continued.

THIRD DISTRICT. MICHAEL FADGEN, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, etc., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, etc.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending January 4	392	429	$252 00	$400 00	14	11	21	821	$652 50
" " 11	336	396	252 00	403 00	14	11	21	732	655 00
" " 18	378	704	252 00	449 83	14	11	21	1082	701 83
" " 25	383	814	252 00	503 83	14	11	21	1197	755 83
	1489	2343	$1008 00	$1757 16	.....	.....	.....	3832	$2765 16
Week ending February 1	364	596	$252 00	$420 00	14	12	21	960	$672 00
" " 8	376	653	252 00	419 83	14	12	21	1029	671 83
" " 15	392	552	252 00	403 66	14	12	21	944	655 66
" " 22	373	664	249 00	414 16	14	12	21	1037	663 16
	1505	2465	$1005 00	$1657 55	.....	.....	.....	3970	$2662 65

Week ending March 1	369	560	$246 00	$424 53	14	12	21	929	$670 53
" " 8	392	360	252 00	421 00	14	12	21	752	673 00
" " 15	392	372	252 00	416 00	14	12	21	764	668 00
" " 22	324	456	252 00	424 33	14	12	21	780	676 33
" " 29	364	384	252 00	426 00	14	12	21	748	678 00
	1841	2132	$1254 04	$2111 86	.....	.....	.....	3973	$3365 86
Week ending April 5	345	412	$252 00	$426 00	14	12	21	757	$678 00
" " 12	378	384	252 00	407 50	14	12	21	762	659 50
" " 19	385	405	252 00	417 83	14	12	21	790	669 83
" " 26	385	504	252 00	420 16	14	12	21	889	672 16
	1493	1705	$1008 00	$1671 49	.....	.....	.....	3198	$2679 49
Week ending May 3	392	450	$252 00	$420 16	14	12	21	842	$672 16
" " 10	378	505	252 00	409 33	14	12	21	883	661 33
" " 17	392	647	252 00	419 50	14	12	21	1039	671 50
" " 24	392	592	252 00	413 83	14	12	21	984	665 83
" " 31	382	528	252 00	409 33	14	12	21	910	661 33
	1936	2722	$1260 00	$2072 15	.....	.....	.....	4658	$3332 15

TABLE A—Continued.

THIRD DISTRICT. — MICHAEL FADGEN, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, etc., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, etc.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending June 7	392	492	$252 00	$417 50	14	12	21	884	$669 50
" " 14	392	444	252 00	422 66	14	12	21	836	674 66
" " 21	406	456	252 00	423 50	14	12	21	862	675 50
" " 28	385	468	252 00	424 33	14	12	21	853	676 33
	1575	1860	$1008 00	$1687 99	.....	.....	.....	3435	$2695 99
Week ending July 5	413	444	$252 00	$426 00	14	12	21	857	$678 00
" " 12	387	384	252 00	419 33	14	12	21	771	671 33
" " 19	392	360	252 00	424 33	14	12	21	752	676 33
" " 26	378	360	252 00	423 50	14	12	21	738	675 50
	1570	1548	$1008 00	$1693 16	.....	.....	.....	3118	$2701 16

Week ending August 2	378	408	$252 00	$426 00	14	12	21	786	$678 00
" " 9	392	408	252 00	419 33	14	12	21	800	671 33
" " 16	420	444	252 00	425 16	14	12	21	864	677 16
" " 23	378	441	252 00	421 83	14	12	21	819	673 83
" " 30	420	438	252 00	425 16	14	12	21	858	677 16
	1988	2139	$1260 00	$2117 48				4127	$3377 48
Week ending September 6	392	432	$252 00	$421 00	14	12	21	824	$673 00
" " 13	420	384	252 00	422 66	14	12	21	804	674 66
" " 20	392	396	252 00	410 67	14	12	21	788	662 67
" " 27	420	360	252 00	421 83	14	12	21	780	673 83
	1624	1572	$1008 00	$1676 16				3196	$2684 16
Week ending October 4	420	456	$252 00	$426 00	14	12	21	876	$678 00
" " 11	403	435	252 00	420 66	14	12	21	838	672 66
" " 18	392	413	252 00	442 33	14	12	21	805	694 33
" " 25	392	408	252 00	400 16	14	12	21	800	652 16
	1607	1712	$1008 00	$1689 15				3319	$2697 15

TABLE A—Continued.

THIRD DISTRICT. — MICHAEL FADGEN, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, etc., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, etc.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Hauled.	Total Amount of Expenditures.
Week ending November 1.....	394	408	$252 00	$426 00	14	12	21	802	$678 00
" " 8.....	393	444	252 00	426 00	14	12	21	837	678 00
" " 15.....	420	432	252 00	411 83	14	12	21	852	663 83
" " 22.....	406	372	252 00	426 00	14	12	21	778	678 00
" " 29.....	434	452	252 00	421 83	14	12	21	886	673 83
	2047	2108	$1260 00	$2111 66	.....	.....	.....	4155	$3371 66
Week ending December 6.....	406	372	$252 00	$425 16	14	12	21	778	$677 16
" " 13.....	342	336	252 00	413 00	14	12	21	678	665 00
" " 20.....	338	360	252 00	411 83	14	12	21	698	663 83
" " 27.....	396	372	252 00	422 66	14	12	21	768	674 66
	1482	1440	$1008 00	$1672 65	.....	.....	.....	2922	$2680 65

FOURTH DISTRICT.

JAMES F. BUSEY, Sup't.

Week ending January 5	1376	1167	$486 00	$441 00	27	11	25	2543	$927 00
" " 12	1068	1162	486 00	443 00	27	11	25	2230	929 00
" " 19	1161	1162	486 00	419 56	27	11	25	2323	905 56
" " 26	1032	1621	486 00	512 66	27	11	25	2653	998 66
	4637	5112	$1944 00	$1816 22	.....	.....	.....	9749	$3760 22
Week ending February 2	1226	1246	$486 00	$448 00	27	11	25	2472	$934 00
" " 9	1219	1465	474 00	416 83	27	11	24	2684	890 83
" " 16	1104	1176	486 00	416 16	27	11	25	2280	902 16
" " 23	1176	1237	486 00	445 50	27	11	25	2413	931 50
	4725	5124	$1932 00	$1726 49	.....	.....	.....	9849	$3658 49
Week ending March 2	1085	1142	$486 00	$419 50	27	11	25	2227	$905 50
" " 9	1195	1278	486 00	435 32	27	11	25	2473	921 32
" " 16	1121	1168	486 00	391 83	27	11	25	2289	877 83
" " 23	1089	1230	486 00	427 66	27	11	25	2319	913 66
" " 30	1207	1290	486 00	430 66	27	11	25	2497	916 66
	5697	6108	$2430 00	$2104 97	.....	.....	.....	11805	$4534 97

TABLE A—Continued.

FOURTH DISTRICT. JAMES F. BUSEY, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, etc., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, etc.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Hauled.	Total Amount of Expenditures.
Week ending April 6	1213	1010	$486 00	$448 00	27	11	25	2223	$934 00
" " 13	1058	1013	486 00	403 00	27	11	25	2071	889 00
" " 20	1057	1046	486 00	412 16	27	11	25	2103	898 16
" " 27	1048	837	486 00	403 32	27	11	25	1885	871 32
	4376	3906	$1926 00	$1666 48	.....	.....	.....	8282	$3592 48
Week ending May 4	970	1016	$486 00	$437 65	27	11	25	1986	$923 65
" " 11	731	732	486 00	437 65	27	11	25	1463	923 65
" " 18	1022	1040	486 00	440 00	27	11	25	2062	926 00
" " 25	543	1127	477 00	448 00	27	11	25	1670	925 00
	3266	3915	$1935 00	$1763 30	.....	.....	.....	7181	$3698 30

Week ending June 1	656	1080	$486 00	$441 50	27	11	25	1736	$927 50
" " 8	539	1063	486 00	430 66	27	11	25	1602	916 66
" " 15	459	689	486 00	412 00	27	9	25	1148	898 00
" " 22	411	418	486 00	424 00	27	10	25	829	910 00
" " 29	560	612	486 00	429 16	27	10	25	1172	915 16
	2625	3862	$2430 00	$2137 32				6487	$4567 32
Week ending July 6	548	652	$486 00	$424 16	27	10	25	1200	$910 16
" " 13	550	972	486 00	428 33	27	10	25	1522	914 33
" " 20	509	432	486 00	430 00	27	10	25	941	916 00
" " 27	612	425	486 00	427 50	27	10	25	1037	913 50
	2219	2481	$1944 00	$1709 99				4700	$3653 99
Week ending August 3	685	347	$486 00	$429 16	27	10	25	1032	$915 16
" " 10	755	399	486 00	427 66	27	10	25	1154	913 66
" " 17	851	404	486 00	430 00	27	10	25	1255	916 00
" " 24	801	464	486 00	430 00	27	10	25	1265	916 00
" " 31	835	473	486 00	429 16	27	10	25	1308	915 16
	3927	2087	$2430 00	$2145 98				6014	$4575 98

TABLE A—Continued.

FOURTH DISTRICT. JAMES F. BUSEY. Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, etc., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, etc.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending September 7	809	423	$486 00	$422 00	27	10	25	1232	$908 00
" " 14	788	416	486 00	430 00	27	10	25	1204	916 00
" " 21	794	388	486 00	388 83	27	10	25	1182	874 83
" " 28	616	468	486 00	430 00	27	10	25	1084	916 00
	3007	1695	$1944 00	$1670 83	.....	.....	.....	4702	$3614 83
Week ending October 5	528	450	$486 00	$430 00	27	10	25	978	$916 00
" " 12	725	380	486 00	416 49	27	10	25	1105	902 49
" " 19	709	373	486 00	417 99	27	10	25	1082	903 99
" " 26	798	323	486 00	400 49	27	10	25	1121	886 49
	2760	1526	$1944 00	$1664 97	.....	.....	.....	4286	$3608 97

Week ending November 2.....	549	494	$486 00	$428 32	27	10	25	1043	$914 32
" " 9.....	773	300	486 00	425 00	27	10	25	1073	911 00
" " 16.....	781	320	486 00	414 83	27	10	25	1101	900 83
" " 23.....	798	466	486 00	428 33	27	10	25	1264	914 33
" " 30.....	959	391	486 00	417 16	27	10	25	1350	903 16
	3860	1971	$2430 00	$2113 64	.....	.....	.....	5831	$4543 64
Week ending December 7.....	902	388	$486 00	$408 50	27	10	25	1290	$894 50
" " 14.....	768	346	480 00	421 33	27	10	25	1114	901 33
" " 21.....	902	358	486 00	414 83	27	10	25	1260	900 83
" " 28.....	852	294	486 00	430 00	27	10	25	1146	916 00
	3424	1386	$1938 00	$1674 66	.....	.....	.....	4810	$3612 66

TABLE A—Continued.

FIFTH DISTRICT. HENRY LANCASTER, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, etc., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, etc.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending January 6	1086	432	$ 477 00	$ 358 67	27	9	21	1518	$ 835 67
" " 13	1112	523	480 00	370 50	27	9	21	1635	850 50
" " 20	1115	510	477 00	364 00	27	9	21	1625	841 00
" " 27	1085	648	468 00	370 33	26	9	21	1733	838 33
	4398	2113	$1902 00	$1463 50	.....	.....	.....	6511	$3365 50
Week ending February 3	1115	538	$ 486 00	$ 373 50	27	10	21	1653	$ 859 50
" " 10	1112	433	486 00	342 00	27	9	21	1545	828 00
" " 17	1115	443	486 00	345 00	27	9	21	1558	831 00
" " 24	1125	438	486 00	343 50	27	9	21	1563	829 50
	4467	1852	$1944 00	$1404 00	.....	.....	.....	6319	$3348 00

Week ending March 3	1102	448	$ 486 00	$ 346 50	27	9	21	1550	$ 832 50
" " 10	1086	550	486 00	371 67	27	10	21	1636	857 67
" " 17	1091	424	486 00	367 33	27	9	21	1515	853 33
" " 24	1097	432	484 50	362 83	27	9	21	1529	847 33
" " 31	1092	432	486 00	367 83	27	9	21	1524	853 83
	5468	2286	$2428 50	$1816 16	.....	.....	.....	7754	$4244 66
Week ending April 7	999	432	$ 486 00	$ 359 50	27	9	21	1431	$ 845 50
" " 14	1017	420	486 00	367 50	27	9	21	1437	853 50
" " 21	1070	408	486 00	358 00	27	9	21	1478	844 00
" " 28	972	432	486 00	372 00	27	9	21	1404	858 00
	4058	1692	$1944 00	$1457 00	.....	.....	.....	5750	$3401 00
Week ending May 5	972	432	$ 486 00	$ 363 66	27	9	21	1404	$ 849 66
" " 12	971	428	486 00	367 17	27	9	21	1399	853 17
" " 19	965	420	486 00	362 50	27	9	21	1385	848 50
" " 26	965	432	486 00	368 67	27	9	21	1397	854 67
	3873	1712	$1944 00	$1462 00	.....	.....	.....	5585	$3406 00

TABLE A—Continued.

FIFTH DISTRICT. — HENRY LANCASTER, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, etc., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, etc.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending June 2	901	400	$ 486 00	$ 355 83	27	9	21	1301	$ 841 83
" " 9	900	424	486 00	364 83	27	9	21	1324	850 83
" " 16	890	432	486 00	372 00	27	9	21	1322	858 00
" " 23	834	424	486 00	372 00	27	11	21	1258	858 00
" " 30	733	432	486 00	367 00	27	9	21	1165	853 00
	4258	2112	$2430 00	$1831 66	.....	.....	.....	6370	$4261 66
Week ending July 7	827	424	$486 00	$369 00	27	9	21	1251	$855 00
" " 14	823	428	486 00	363 00	27	9	21	1251	849 00
" " 21	838	432	486 00	363 67	27	9	21	1270	849 67
" " 28	812	424	486 00	359 00	27	9	20	1236	845 00
	3300	1708	$1944 00	$1454 67	.....	.....	.....	5008	$3398 67

Week ending August 4	802	432	$486 00	$366 16	27	9	21	1234	$852 16
" " 11	794	432	486 00	372 00	27	9	21	1226	858 00
" " 18	760	432	486 00	372 00	27	9	21	1192	858 00
" " 25	796	504	486 00	404 00	27	9	21	1300	890 00
	3152	1800	$1944 00	$1514 16	.....	.....	.....	4952	$3458 16
Week ending September 1	815	428	$486 00	$370 50	27	9	21	1243	$856 50
" " 8	817	432	486 00	372 00	27	9	21	1249	858 00
" " 15	759	432	486 00	372 00	27	9	21	1191	858 00
" " 22	851	428	486 00	370 50	27	9	21	1279	856 50
" " 29	797	432	486 00	372 00	27	9	21	1229	858 00
	4039	2152	$2430 00	$1857 00	.....	.....	.....	6191	$4287 00
Week ending October 6	853	432	$486 00	$368 66	27	9	21	1285	$854 66
" " 13	863	432	486 00	372 00	27	9	21	1295	858 00
" " 20	809	432	486 00	372 00	27	9	21	1241	858 00
" " 27	861	438	483 00	375 00	27	9	21	1299	858 00
	3386	1734	$1941 00	$1487 66	.....	.....	.....	5120	$3428 66

TABLE A--Continued.

FIFTH DISTRICT. — HENRY LANCASTER, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, etc., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, etc.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending November 3.....	872	432	$486 00	$372 00	27	9	21	1304	$858 00
" " 10.....	908	432	486 00	372 00	27	9	21	1340	858 00
" " 17.....	893	432	486 00	369 50	27	9	21	1325	855 50
" " 24.....	903	432	486 00	368 66	27	9	21	1335	854 66
	3576	1728	$1944 00	$1482 16	.....	.....	.....	5304	$3426 16
Week ending December 1.....	909	432	$486 00	$367 16	27	9	21	1339	$853 16
" " 8.....	963	452	480 00	413 66	27	9	21	1415	893 66
" " 15.....	906	432	486 00	370 33	27	9	21	1338	856 33
" " 22.....	1010	432	486 00	371 17	27	9	21	1442	857 17
" " 29.....	1051	514	486 00	432 67	27	11	21	1565	918 67
	4839	2260	$2424 00	$1954 99	.....	.....	.....	7099	$4378 99

SIXTH DISTRICT.

JOHN MEAGHER, SUP'T.

Week ending January 7	1175	603	$504 00	$344 33	28	9	19	1778	$848 33
" " 14	1266	530	504 00	306 12	28	9	19	1796	810 12
" " 21	1295	772	504 00	343 00	28	9	19	2067	847 00
" " 28	1306	819	504 00	352 00	28	9	19	2125	856 00
	5042	2724	$2016 00	$1345 45	.....	.....	.....	7766	$3361 45
Week ending February 4	1308	813	$504 00	$352 00	28	9	19	2121	$856 00
" " 11	1299	793	504 00	326 96	28	9	19	2092	830 96
" " 18	1310	672	504 00	293 45	28	9	19	1982	797 45
" " 25	1305	666	504 00	308 28	28	9	19	1971	812 28
	5222	2944	$2016 00	$1280 69	.....	.....	.....	8166	$3296 69
Week ending March 4	1336	791	$504 00	$340 13	28	9	19	2127	$844 13
" " 11	1300	607	504 00	343 46	28	9	19	1907	847 46
" " 18	1300	878	504 00	384 96	28	9	19	2178	888 96
" " 25	1311	781	504 00	424 64	28	9	19	2092	928 64
	5247	3057	$2016 00	$1493 19	.....	.....	.....	8304	$3509 19

TABLE A—Continued.

SIXTH DISTRICT. — JOHN MEAGHER, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, etc., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, etc.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending April 1	1311	549	$504 00	$349 00	28	9	19	1860	$853 00
" " 8	1298	580	504 00	352 00	28	9	19	1878	856 00
" " 15	1258	533	504 00	323 27	28	9	19	1791	827 27
" " 22	1257	513	504 00	312 77	28	9	19	1770	816 77
" " 29	1271	546	504 00	324 25	28	9	19	1817	828 25
	6395	2721	$2520 00	$1661 29	.....	.....	.....	9116	$4181 29
Week ending May 6	1210	530	$504 00	$319 80	28	9	19	1740	$823 80
" " 13	1194	582	504 00	348 16	28	9	19	1776	852 16
" " 20	1178	578	504 00	332 64	28	9	19	1756	836 64
" " 27	1191	593	504 00	350 32	28	9	19	1784	854 32
	4773	2283	$2016 00	$1350 92	.....	.....	.....	7056	$3366 92

Week ending June 3	1161	576	$504 00	$330 97	28	9	19	1737	$834 97
" " 10	1120	585	504 00	333 45	28	9	19	1705	837 45
" " 17	1101	591	504 00	350 50	28	9	19	1692	854 50
" " 24	1075	592	504 00	350 50	28	9	19	1667	854 50
	4457	2344	$2016 00	$1365 42				6801	$3381 42
Week ending July 1	1082	573	$504 00	$344 33	28	9	19	1655	$848 33
" " 8	1079	599	504 00	352 00	28	9	19	1678	856 00
" " 15	1062	592	504 00	350 50	28	9	19	1654	854 50
" " 22	1084	582	504 00	344 98	28	9	19	1666	848 98
" " 29	1046	587	504 00	346 00	28	9	19	1633	850 00
	5353	2933	$2520 00	$1737 81				8286	$4257 81
Week ending August 5	1020	952	$504 00	$348 16	28	9	19	1612	$852 16
" " 12	982	600	504 00	350 32	28	9	19	1582	854 32
" " 19	977	598	504 00	351 16	28	9	19	1575	855 16
" " 26	979	598	504 00	352 00	28	9	19	1577	856 00
	3958	2388	$2016 00	$1401 64				6346	$3417 64

TABLE A—Concluded.

SIXTH DISTRICT. — JOHN MEAGHER, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, etc., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, etc.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending September 2	990	592	$504 00	$350 50	28	9	19	1582	$854 50
" " 9	998	582	504 00	344 99	28	9	19	1580	848 99
" " 16	983	563	504 00	339 64	28	9	19	1546	843 64
" " 23	960	586	504 00	347 33	28	9	19	1546	851 33
" " 30	932	587	504 00	349 00	28	9	19	1519	853 00
	4863	2910	$2520 00	$1731 46	.....	.....	.....	7773	$4251 46
Week ending October 7	928	592	$504 00	$350 50	28	9	19	1520	$854 50
" " 14	958	599	504 00	352 00	28	9	19	1557	856 00
" " 21	1002	592	504 00	350 50	28	9	19	1594	854 50
" " 28	973	588	504 00	349 00	28	9	19	1561	853 00
	3861	2371	$2016 00	$1402 00	.....	.....	.....	6232	$3418 00

Week ending November 4.....	981	598	$504 00	$352 00	28	9	19	1579	$856 00
" " 11.....	981	557	504 00	341 50	28	9	19	1538	845 50
" " 18.....	1008	593	504 00	350 50	28	9	19	1601	854 50
" " 25	1013	565	504 00	343 00	28	9	19	1578	847 00
	3983	2313	$2016 00	$1387 00	.....	.....	.....	6296	$3403 00
Week ending December 2.....	1066	568	$504 00	$344 50	28	9	19	1634	$848 50
" " 9.....	1096	438	504 00	314 16	28	9	20	1534	818 16
" " 16.....	1080	453	504 00	298 48	28	9	20	1533	802 48
" " 23.....	1075	587	504 00	357 33	28	9	20	1662	861 33
" " 30	1094	585	504 00	357 33	28	9	20	1679	861 33
	5411	2631	$2520 00	$1671 80	.....	.....	.....	8042	$4191 80

TABLE B.

Report of work done in the Department of Street Cleaning for each Month of the Year ending December 31, 1893, and amount expended for Dumps, Tools and Incidentals; also total amount of receipts for Refuse, etc., not including the work done under the Special Appropriation.

Month.	Salaries.	Total No. of Loads of Garbage Collected and Removed.	Total No. of Loads of Street Dirt, Sand, Snow, Ice, etc., Collected and Removed.	Cost of Collecting and Removing Garbage.	Cost of Collecting and Removing Street Dirt, Sand, Snow, Ice, etc.	Cost of the Several Dumps.	Expenditures for Tools, Incidentals, etc.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Number of Loads of all Kinds Removed.	Total Expenditure for Work Done in Street and Garbage Department.	Total Expenditure for Sweepers, Sprinklers, etc.	Paid to M. W. Adams for Removal of Garbage.	Total Amount of Money Received and Paid to Comptroller.
January....	.....	23,606	19,914	$10,902 00	$10,289 82	$396 00	$ 18 85	152	64	143	43,520	$21,191 82	.....	$4,750 00	.....
February .	.....	23,917	20,786	10,929 00	9,569 06	380 68	91 00	152	64	143	44,703	20,498 06	.....	.....	.....
March.....	.....	26,246	20,668	12,154 50	11,046 42	388 00	524 50	152	65	141	46,914	23,200 92	.....	.....	$208 65
April.....	.....	25,100	17,267	11,643 00	10,395 81	384 00	72 87	153	65	142	42,367	22,038 81	$ 83 55	2,375 00	119 05
May	.....	23,449	19,090	12,015 00	11,393 12	389 34	54 72	153	65	143	42,539	23,408 12	1,882 65	.....	.....
June	.....	20,557	17,399	11,967 00	11,062 84	398 00	219 10	154	65	143	37,956	23,029 84	340 32	.....	61 00
July.....	.....	20,497	15,404	12,090 00	11,275 05	380 68	74 37	155	64	143	35,901	23,365 05	2,086 73	2,375 00	.....
August.....	.....	21,271	14,863	12,357 00	11,549 01	437 68	84 00	155	64	144	36,134	23,906 01	914 86	.....	80 75
September	.....	21,073	14,184	12,402 00	11,083 59	443 00	82 70	155	64	144	35,257	23,485 59	749 10	.....	.....
October....	.....	20,903	14,028	11,967 00	10,933 03	437 68	138 17	155	64	144	34,931	22,900 03	842 59	.....	.....
November	.....	21,054	13,557	11,898 00	11,047 38	759 01	99 00	155	63	145	34,611	22,945 38	676 57	.....	.....
December.	.....	24,844	14,312	13,200 00	11,863 78	394 68	325 85	155	63	146	39,156	25,063 78	1,036 35	.....	314 75
Total....	$9,999 68	272,517	201,472	$143,524 50	$131,508 91	$5,188 75	$1,785 13	.....	.....	.....	473,989	$275,033 41	$8,612 72	$9,500 00	$784 20

TABLE C.

RECAPITULATION.

Total number of loads of garbage and ashes collected and removed, from January 1st to December 31st, 1893, inclusive	272,517
Total number of loads of street dirt, sand, etc., collected and removed, from January 1st to December 31st, 1893, inclusive	201,472
Total number of loads of all kinds removed during the year 1893	473,989

TABLE C—Concluded.

Total amount paid for collecting and removing garbage and ashes, from January 1st to December 31st, 1893, inclusive	$143,524	50
Total amount paid for collecting and removing street dirt, sand, etc., from January 1st to December 31st, 1893, inclusive	131,508	91
	$275,033	41
Amount of money received for refuse, from January 1st to December 31st, 1893, inclusive	$784	20

TABLE D.

Showing the Amount of Animal and Vegetable Garbage delivered to Contractors at Canton and Winan's Cove Dumps.

1893. Months.	Canton Dump.	No. of Loads.
January	John Holdefer, Supt	1,429
February	" "	1,438
March	" "	1,437
April	" "	1,809
May	" "	1,637
June	" "	2,425
July	John Hughes, Supt.	3,164
August	" "	3,296
September	" "	3,678
October	" "	1,861
November	" "	1,315
December	" "	1,638
		25,127

TABLE D—Concluded.

1893. Months.	Winans' Cove Dump.	No. of Loads.	Total.
January	L. S. Fefel, Sup't	2,492	3,921
February	" "	2,446	3,884
March	" "	2,525	3,962
April	" "	3,599	5,408
May	" "	3,899	5,536
June	" "	3,322	5,747
July	" "	8,339	11,503
August	" "	7,052	10,348
September	" "	6,039	9,717
October	" "	3,426	5,287
November	" "	2,979	4,294
December	" "	3,364	5,002
		49,482	74,609

TABLE E.

Showing Disbursements for Year Ending December 31, 1893.

Total amount expended for collecting and removing garbage, ashes, street dirt, etc., from January 1 to December 31, 1893...	$275,033 41
Amount expended for dumps, from January 1 to December 31, 1893..... ...	5,188 75
Amount expended for salaries, from January 1 to December 31, 1893.....	9,999 68
Amount expended for sweepers, sprinklers, etc.....	8,612 72
Amount expended for tools, from January 1 to December 31, 1893.....	1,785 13
Paid to M. W. Adams for removal of garbage..	9,500 00
Total.....	$310,119 69

Amount of appropriation for the Department of Street Cleaning for the year 1893	$320,086 00
Amount of appropriation expended.....	310,119 69
Total unexpended balance.....	$9,966 31

TABLE F.

Showing Amount Expended for Removal of Garbage, Street Dirt, etc., in the City Annex, and Salary of Superintendent.

SEVENTH DISTRICT. — JOSEPH McGEE, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, etc., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, etc.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending January 7	507	155	$216 00	$111 49	12	3	6	662	$327 49
" " 14	501	79	216 00	72 11	12	3	6	580	288 11
" " 21	485	233	216 00	114 90	12	3	6	718	330 90
" " 28	490	300	216 00	147 95	12	3	6	790	363 95
	1983	767	$864 00	$446 45	.....	.....	.....	2750	$1310 45
Week ending February 4	492	315	$216 00	$110 66	12	3	6	807	$326 66
" " 11	486	333	216 00	88 31	12	3	6	819	304 31
" " 18	485	250	216 00	77 16	12	3	6	735	293 16
" " 25	490	204	216 00	118 63	12	3	6	694	334 63
	1953	1102	$864 00	$394 76	.....	.....	.....	3055	$1258 76

Week ending March 4	492	204	$216 00	$115 18	12	3	6	696	$331 18
" " 11	490	112	216 00	81 66	12	3	6	602	297 66
" " 18	492	147	216 00	98 97	12	3	6	639	314 97
" " 25	477	145	216 00	127 00	12	3	6	622	345 00
	1951	608	$864 00	$424 81				2559	$1288 81
Week ending April 1	477	259	$216 00	$162 00	12	5	8	736	$378 00
" " 8	466	232	216 00	170 00	12	5	8	698	386 00
" " 15	471	218	216 00	167 27	12	6	11	689	383 27
" " 22	478	242	216 00	165 66	12	6	11	720	381 66
" " 29	480	247	216 00	209 94	12	6	11	727	425 94
	2372	1198	$1080 00	$874 87				3570	$1954 87
Week ending May 6	468	253	$216 00	$217 16	12	6	11	721	$433 16
" " 13	477	295	216 00	220 82	12	6	12	772	436 82
" " 20	452	217	234 00	215 48	13	6	12	669	449 48
" " 27	435	269	234 00	243 00	13	6	12	704	477 00
	1832	1034	$900 00	$896 46				2866	$1796 46

TABLE F—Continued.

SEVENTH DISTRICT. — JOSEPH McGEE, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, etc., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, etc.	Number of Garbage Carts Employed.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending June 3	436	238	$234 00	$223 82	13	6	12	674	$457 82
" " 10	438	201	234 00	228 00	13	6	12	639	462 00
" " 17	401	226	234 00	225 50	13	6	12	627	459 50
" " 24	403	226	234 00	243 00	13	6	12	629	477 00
	1678	891	$936 00	$920 32	.....	.....	.....	2569	$1856 32
Week ending July 1	392	238	$234 00	$224 66	13	6	12	630	$458 66
" " 8	395	189	234 00	224 65	13	6	12	584	458 65
" " 15	422	219	234 00	228 00	13	6	12	641	462 00
" " 22	440	229	234 00	228 00	13	6	12	669	462 00
" " 29	433	186	252 00	219 99	14	5	12	619	471 99
	2082	1061	$1188 00	$1125 30	.....	.....	.....	3143	$2313 30

Week ending August 5	449	188	$252 00	$210 00	14	5	12	637	$462 00
" " 12	468	181	252 00	205 83	14	5	12	649	457 83
" " 19	442	280	252 00	210 00	14	5	12	722	462 00
" " 26	430	239	252 00	225 00	14	5	12	669	477 00
	1789	888	$1008 00	$850 83				2677	$1858 83
Week ending September 2	443	191	$252 00	$207 50	14	5	12	634	$459 50
" " 9	440	181	252 00	192 42	14	5	12	621	444 42
" " 16	430	187	252 00	164 95	14	5	12	617	416 95
" " 23	405	195	252 00	203 32	14	5	12	600	455 32
" " 30	462	182	252 00	216 66	14	5	12	644	468 66
	2180	936	$1260 00	$984 85				3116	$2244 85
Week ending October 7	405	200	$252 00	$191 59	14	5	12	605	$443 59
" " 14	409	206	252 00	210 00	14	5	12	615	462 00
" " 21	421	230	252 00	203 32	14	5	12	651	455 32
" " 28	425	179	252 00	201 27	14	5	12	604	453 27
	1660	815	$1008 00	$806 18				2475	$1814 18

TABLE F—Continued.

SEVENTH DISTRICT. — JOSEPH McGEE, Sup't.	Garbage and Ashes Removed.	Street Dirt, Sand, etc., Removed.	Cost of Removal of Garbage.	Cost of Removal of Street Dirt, Sand, etc.,	Number of Garbage Carts Employed.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending November 4	472	193	$252 00	$208 32	14	5	12	665	$460 32
" " 11	488	177	252 00	204 99	14	5	12	665	456 99
" " 18	487	194	252 00	207 49	14	5	12	681	459 49
" " 25	482	208	252 00	219 49	14	5	12	690	471 49
	1929	772	$1008 00	$840 29	.....	.....	.....	2701	$1848 29
Week ending December 2	482	178	$252 00	$207 49	14	5	12	660	$459 49
" " 9	507	123	252 00	174 71	14	5	12	630	426 71
" " 16	491	221	252 00	204 99	14	5	12	712	456 99
" " 23	509	208	252 00	218 33	14	5	12	717	470 33
" " 30	529	188	252 00	201 66	14	5	12	717	453 66
	2518	918	$1260 00	$1007 18	.....	.....	.....	3436	$2267 18

TABLE F—Concluded.

Showing amount expended, etc.

Amount of appropriation.....		$25,099 00
Amount expended for removing garbage and ashes, from January 1 to December 31, 1893..	$12,240 00	
Amount expended for removing street dirt, sand, etc., from January 1 to December 31, 1893	9,495 17	
Salary of Superintendent, from January 1 to December 31, 1893	999 97	
		22,735 14
Unexpended balance.....		$2,363 86

TABLE G.

Work done under the Special Appropriation, as per Resolution Approved January 24, 1893.

MICHAEL FADGEN, Sup't.	Street Dirt, Ice, Snow and Sand Removed.	Cost of Removal of Ice, Snow, Street Dirt and Sand.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending January 18	254	$197 83	7	19	254	$197 83
" " 25	715	528 50	13	35	715	528 50
	969	$726 33	.....	.....	969	$726 33
Week ending February 1	306	$176 50	17	41	306	$176 50
	306	$176 50	.....	.....	306	$176 50
Week ending March 29	125	$115 50	6	6	125	$115 50
	125	$115 50	.....	.....	125	$115 50

Week ending April 5	274	$201 16	8	7	274	$201 16
" " 12	221	177 00	8	7	221	177 00
" " 19	221	194 50	8	6	221	194 50
" " 26	336	205 00	8	7	336	205 00
	1052	$777 66	.....	.....	1052	$777 66
Week ending May 3	240	$192 00	8	7	240	$192 00
" " 10	304	200 50	7	8	304	200 50
" " 17	391	189 50	8	6	391	189 50
" " 24	314	188 83	8	7	314	188 83
" " 31	294	200 00	8	7	294	200 00
	1543	$970 83	.....	.....	1543	$970 83
Week ending June 7	307	$184 66	8	6	307	$184 66
" " 14	152	107 00	8	7	152	107 00
	459	$291 66	.....	.....	459	$291 66

TABLE G—Continued.

JAMES F. BUSEY, Sup't.	Street Dirt, Ice, Snow and Sand Removed.	Cost of Removal of Ice, Snow, Street Dirt and Sand.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending January 19	712	$220 77	7	23	712	$220 77
" " 26	1821	675 83	14	49	1821	675 83
	2533	$896 60	.....	.....	2533	$896 60
Week ending March 30	380	$103 33	7	5	380	$103 33
	380	$103 33	.....	.....	380	$103 33

Week ending April 6	420	$196 00	7	7	420	$196 00
" " 13	429	162 50	7	7	429	162 50
" " 20	428	146 99	7	7	428	146 50
" " 27	416	152 32	7	7	416	152 32
	1693	$657 81	....	.....	1693	$657 81
Week ending May 4	521	$179 65	7	7	521	$179 65
" " 11	527	177 16	7	7	527	177 16
" " 18	210	177 32	7	7	210	177 32
" " 25	518	196 00	7	7	518	196 00
	1776	$730 13	.....	.....	1776	$730 13
Week ending June 1	216	$189 00	7	7	216	$189 00
" " 8	318	146 96	7	7	318	146 99
	534	$335 99	.....	.....	534	$335 99

TABLE G—Continued.

HENRY LANCASTER, Sup't.	Street Dirt, Ice, Snow and Sand Removed.	Cost of Removal of Ice, Snow, Street Dirt and Sand.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending January 20	255	$191 50	9	16	255	$191 50
" " 27	760	472 17	26	50	760	472 17
	1015	$663 67	.....	.....	1015	$663 67
Week ending February 8	170	$ 51 00	5	.....	170	$ 51 00
" " 15	232	70 50	5	.....	232	70 50
" " 22	268	84 00	6	.....	268	84 00
	670	$205 50	.....	.....	670	$205 50

Week ending March 1	260	$114 50	5	19	260	$114 50
" " 31	288	168 00	6	6	288	168 00
	548	$282 50	.....	.....	548	$282 50
Week ending April 7	288	$166 33	6	6	288	$166 33
" " 14	244	141 50	6	6	244	141 50
" " 21	236	140 17	6	6	236	140 17
" " 28	240	140 00	6	6	240	140 00
	1008	$588 00	.....	.....	1008	$588 00
Week ending May 5	232	$138 67	6	6	232	$138 67
" " 12	240	141 66	6	6	240	141 66
" " 19	264	154 84	6	6	264	154 84
" " 26	288	166 33	6	6	288	166 33
	1024	$601 50	.....	.....	1024	$601 50
Week ending June 2	272	$160 34	6	6	272	$160 34
" " 9	288	166 33	6	6	288	166 33
	560	$326 67	.....	.....	560	$326 67

TABLE G—Continued.

JOHN MEAGHER, Sup't.	Street Dirt, Sand, Ice and Snow Removed.	Cost of Removal of Ice, Snow, Street Dirt and Sand.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending January 21	327	$274 50	7	21	327	$274 50
" " 28	860	416 88	14	36	860	416 88
	1187	$691 38	.....	.....	1187	$691 38
Week ending April 1	444	$194 32	7	7	444	$194 32
" " 8	451	195 16	7	8	451	195 16
" " 15	397	161 64	7	7	397	161 64
" " 22	327	136 00	8	8	327	136 00
" " 29	303	133 50	6	6	303	133 50
	1922	$820 62	.....	.....	1922	$820 62

Week ending May 6	368	$150 32	7	6	368	$150 32
" " 13	451	187 15	7	7	451	187 15
" " 20	405	172 31	7	7	405	172 31
" " 27	462	196 00	7	7	462	196 00
	1686	$705 78	.....	.....	1686	$705 78
Week ending June 3	415	$172 31	7	7	415	$172 31
" " 10	423	168 14	7	7	423	168 14
	838	$340 45	.....	.....	838	$340 45

TABLE G—Continued.

JOSEPH McGEE, Sup't.	Street Dirt, Sand, Ice and Snow Removed.	Cost of Removal of Ice, Snow, Street Dirt and Sand.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending January 21.....	173	$89 81	3	7	173	$89 81
" 28.....	196	98 54	3	7	196	98 54
	369	$188 35	.....	.....	369	$188 35

Week ending February 4	324	$120 83	3	7	324	$120 83
" " 11	325	103 31	3	7	325	103 31
" " 18	240	89 82	3	7	240	89 82
" " 25	220	107 11	3	7	220	107 11
" " 28	134	77 13	3	7	134	77 13
	1243	$498 20	.....	.....	1243	$498 20

TABLE G—Continued.

B. V. KELLY, Sup't.	Street Dirt, Sand, Ice and Snow Removed.	Cost of Removal of Ice, Snow, Street Dirt and Sand.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total amount of Expenditures.
Week ending January 23	720	$288 00	6	23	720	$288 00
" " 30	819	358 33	22	52	819	358 33
	1539	$646 33	.....	.....	1539	$646 33
Week ending February 10	500	$ 82 50	5	.....	500	$ 82 50
" " 17	500	75 00	5	.....	500	75 00
" " 24	600	90 00	5	.....	600	90 00
" " 28	1040	209 50	13	20	1040	209 50
	2640	$457 00	.....	.....	2640	$457 00

Week ending April 3	644	$186 00	7	6	644	$186 00
" " 10	385	176 33	7	7	385	176 33
" " 17	280	163 33	7	7	280	163 33
" " 24	346	131 33	7	7	346	131 33
	1655	$656 99	.....	.....	1655	$656 99
Week ending May 1	401	$153 00	7	7	401	$153 00
" " 8	468	181 16	7	7	468	181 16
" " 15	336	186 00	7	6	336	186 00
" " 22	420	167 66	7	7	420	167 66
" " 29	504	194 33	7	7	504	194 33
	2129	$882 15	.....	.....	2129	$882 15
Week ending June 5	504	$196 00	7	7	504	$196 00
" " 12	560	163 33	7	7	560	163 33
	1064	$359 33	.....	.....	1064	$359 33

TABLE G—Continued.

GEORGE E. McCAULEY, Sup't.	Street Dirt, Sand, Ice and Snow Removed.	Cost of Removal of Ice, Snow, Street Dirt and Sand.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending January 24	1348	$658 92	11	27	1348	$658 92
" " 31	806	417 62	31	33	896	417 62
	2154	$1076 54	.....	.....	2154	$1076 54
Week ending February 4	42	$ 10 50	2	.....	42	$ 10 50
" " 11	220	54 00	4	.....	220	54 00
" " 17	207	48 00	4	.....	207	48 00
" " 28	338	95 66	4	1	338	95 66
	807	$208 16	.....	.....	807	$1076 54

Week ending March 28	208	$94 81	7	8	208	$94 81
	208	$94 81			208	$94 81
Week ending April 4	606	$196 16	7	8	606	$196 16
" " 11	510	193 66	7	7	510	193 66
" " 18	381	147 00	7	7	381	147 00
" " 25	439	163 31	7	7	439	163 31
	1936	$700 13			1936	$700 13
Week ending May 2	459	$177 29	7	7	459	$177 29
" " 9	513	195 99	7	8	513	195 99
" " 16	497	192 16	7	8	497	192 16
" " 23	434	159 14	7	7	434	159 14
" " 30	492	192 99	7	8	492	192 99
	2395	$917 57			2395	$917 57
Week ending June 6	512	$196 82	7	8	512	$196 82
" " 13	325	130 16	7	7	325	130 16
	837	$326 98			837	$326 98

TABLE G—Continued.

Name of Superintendent.	Ice and Snow Removed.	Cost of Removal of Ice and Snow.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending Feb. 1. Young.....	840	$420 04	14	30	840	$420 04
" " 8. "	840	421 06	14	30	840	421 06
" " 16. "	900	282 67	22	11	900	282 67
" " 23. "	700	253 08	22	8	700	253 08
" " 28. "	440	256 45	19	11	440	256 45
	3720	$1633 30	.....	.....	3720	$1633 30
Week ending Feb. 1. McDonough.....	462	$349 86	8	24	462	$349 86
" " 8. "	480	358 35	8	25	480	348 35
" " 16. "	576	296 40	8	24	576	296 40
" " 23. "	576	356 79	8	24	576	356 79
" " 28. "	385	270 49	8	21	385	270 49
	2479	$1631 89	.....	.....	2479	$1631 89

Week ending Feb. 1.	Brietschwerdt....	584	$405 35	9	26	584	$405 35
" " 8.	"	598	383 88	9	24	598	383 88
" " 15.	"	539	283 00	9	25	539	283 00
" " 23.	"	616	345 22	8	22	616	345 22
" " 28.	"	447	301 82	8	22	447	301 82
		2784	$1719 27	.....	.....	2784	$1719 27
Week ending Feb. 1.	Lee.....	960	$448 85	13	26	960	$448 85
" " 8.	"	1225	458 76	14	26	1225	458 76
" " 15.	"	1177	374 54	14	25	1177	374 54
" " 23.	"	1053	422 27	14	25	1053	422 27
" " 28.	"	798	355 45	14	20	798	355 45
		5213	$2059 87	.....	.....	5213	$2059 87
Week ending Feb. 1.	Brown....	450	$436 29	14	33	450	$436 27
" " 8.	"	450	442 71	14	30	450	442 71
" " 15.	"	450	346 07	14	26	450	346 07
" " 23.	"	420	371 66	12	23	420	371 66
" " 28.	"	401	355 82	11	22	401	355 82
		2171	$1952 55	.....	.....	2171	$1952 55

TABLE G—Continued.

Name of Superintendent.	Ice and Snow Removed.	Cost of Removal of Ice and Snow.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending Feb. 2. Murphy.....	759	$374 55	10	20	759	$374 55
" " 9. "	694	335 83	10	21	694	335 83
" " 16. "	563	280 20	12	21	563	280 20
" " 23. "	413	354 69	10	22	413	354 69
" " 28. "	807	243 67	10	22	807	243 67
	3236	$1,588 94	.....	.....	3236	$1588 94
Week ending Feb. 2. Malloy.....	516	$343 20	8	23	516	$343 20
" " 9. "	504	327 95	8	23	504	327 95
" " 16. "	540	291 18	10	23	540	291 18
" " 23. "	672	381 19	10	22	672	381 19
" " 28. "	540	313 06	10	22	540	313 06
	2772	$1656 58	.....	.....	2772	$1656 58

Week ending Feb. 1.	Larkin.....	640	$345 00	10	21	640	$345 00
" " 8.	"	336	336 17	10	21	336	336 17
" " 15.	"	375	274 38	10	19	375	274 38
" " 23.	"	510	333 71	9	19	510	333 71
" " 28.	"	150	317 34	10	19	150	317 34
		2011	$1606 60	.....	.....	2011	$1606 60
Week ending Feb. 2.	Chapman.....	204	$451 85	10	28	204	$451 85
" " 9.	"	670	428 20	14	28	670	428 20
" " 16.	"	480	358 63	14	25	480	358 63
" " 23.	"	600	433 06	13	24	600	433 06
" " 28.	"	935	290 70	12	24	935	290 70
		2889	$1962 44	.....	.....	2889	$1962 44
Week ending Feb. 2.	Seyfried.....	610	$434 90	15	26	610	$434 90
" " 9.	"	660	424 18	11	26	660	424 18
" " 16.	"	660	345 50	11	26	660	345 50
" " 23.	"	550	445 21	11	26	550	445 21
" " 28.	"	352	307 50	11	25	352	307 50
		2832	$1954 29	.....	.....	2832	$1954 29

TABLE G—Continued.

Name of Superintendent.	Ice and Snow Removed.	Cost of Removal of Ice and Snow.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending Feb. 2. Hooper.....	540	$292 20	9	18	540	$292 20
" " 9. "	463	290 18	9	16	463	290 18
" " 16. "	382	227 81	9	15	382	227 81
" " 23. "	511	285 67	9	15	511	285 67
" " 28. "	350	244 03	9	14	350	244 03
	2246	$1339 89	.....	.....	2246	$1339 89
Week ending Feb. 2. Baker.....	416	$362 63	9	24	416	$362 63
" " 9. "	479	322 13	9	23	479	322 13
" " 16. "	393	273 25	9	21	393	273 25
" " 23. "	500	334 60	9	20	500	334 60
" " 28. "	432	243 75	9	18	432	243 75
	2220	$1536 36	.....	.....	2220	$1536 36

Week ending Feb. 3. McCurley.....	800	$418 83	13	23	800	$418 83
" " 10. "	800	350 96	13	24	800	350 96
" " 17. "	740	245 56	12	15	740	245 56
" " 24. "	740	303 71	12	15	740	303 71
" " 28. "	700	206 94	12	15	700	206 94
	3780	$1526 00	.....	.....	3780	$1526 00
Week ending Feb. 2. Keyser.....	504	$387 65	12	22	504	$387 65
" " 9. "	470	349 99	13	22	470	349 99
" " 16. "	470	320 56	12	20	470	320 56
" " 23. "	664	472 79	12	20	664	472 79
" " 28. "	480	281 95	12	19	480	281 95
	2588	$1812 94	.....	.....	2588	$1812 94
Week ending Feb. 2. Carll.....	432	$384 75	12	24	432	$384 75
" " 9. "	624	420 29	12	25	624	420 29
" " 16. "	624	344 47	13	24	624	344 47
" " 23. "	624	387 66	13	22	624	387 66
" " 28. "	416	320 13	13	23	416	320 13
	2720	$1857 30	.....	.....	2720	$1857 30

TABLE G—Continued.

Name of Superintendent.	Ice and Snow Removed.	Cost of Removal of Ice and Snow.	Number of Street Carts Employed.	Number of Scrapers and Sweepers Employed.	Total Amount of Loads Removed.	Total Amount of Expenditures.
Week ending Feb. 2. H. Kelly.....	740	$464 19	14	28	740	$464 19
" " 9. "	740	436 10	15	27	740	436 10
" " 16. "	740	409 54	15	27	740	409 54
" " 23. "	780	523 50	15	27	780	523 50
" " 28. "	700	389 38	14	27	700	389 38
	3700	$2222 71	.....	.....	3700	$2222 71
Week ending Feb. 2. Lumsden.....	832	$612 15	14	28	832	$612 15
" " 9. "	655	419 41	14	29	655	419 41
" " 16. "	740	361 66	13	27	740	361 66
" " 23. "	621	429 58	13	27	621	429 58
" " 28. "	556	334 68	13	25	556	334 68
	3404	$2157 48	.....	.....	3404	$2157 48

Week ending Feb. 8.	Preston.....	237	$106 65	3	7	237	$106 65
" " 15.	"	237	101 40	3	7	237	101 40
" " 23.	"	227	134 05	3	7	227	134 05
" " 28.	"	161	116 80	3	7	161	116 80
		862	$458 90	.....	.....	862	$458 90

TABLE G—Concluded.

Report of work done in the Department of Street Cleaning under the special appropriation of $50,000 during the following months:

MONTH.	Total Number of Street Carts Employed.	Total Number of Sweepers and Scrapers Employed.	Total Number of Loads of Ice, Snow and Street Dirt Collected and Removed.	Total Expenditure for Collecting and Removing Ice, Snow and Street Dirt.
January	86	186	9,766	$4,889 20
February	232	440	57,293	32,221 25
March	12	19	1,261	596 14
April	42	41	9,266	4,201 21
May	42	42	10,553	4,807 96
June	42	42	4,292	1,981 08
Total	421	770	92,431	$48,696 84

Clerk's salary	$145 30	$48,696 84
Tools	935 08	
Unexpended balance	222 78	
		1,303 16
		$50,000 00

THIRTY-FOURTH ANNUAL REPORT

OF THE

Public Park Commission

TO THE

MAYOR AND CITY COUNCIL OF BALTIMORE,

FOR THE

FISCAL YEAR ENDING DECEMBER 31, 1893.

The Public Park Commission

OF THE

City of Baltimore, Maryland.

HON. FERDINAND C. LATROBE, MAYOR,
Chairman Ex-officio.

GEN. JOHN S. BERRY,
Secretary.

DAVID L. BARTLETT,

GERMAN H. HUNT,

JOHN C. FROEHLICH,

DOUGLAS H. THOMAS,

GEORGE R. WILLIS.

REPORT

— OF THE —

PUBLIC PARK COMMISSION.

BALTIMORE, December 31, 1893.

To the Honorable the Mayor and
City Council of Baltimore:

GENTLEMEN:

In accordance with Section 5 of an ordinance providing for public park or parks, approved July 21, 1860, we beg leave to submit the following synopsis of work done in the public parks under our jurisdiction for the year 1893.

The severity of the winter of 1892 and 1893 retarded the resumption of active work, and when it began much time was consumed in repairing damages. The penetration of the frost as reported by the General Superintendent and Engineer was from 12 inches to 30 inches, according to exposure and character of the soil.

At Druid Hill the erection of the new gateway at Eutaw Place has crowned the work of the previous

year, whilst the erection of the heroic statue of William Wallace, within easy range of vision, has added much to the view upon entering the park. Many thanks are due our fellow citizen, Mr. William Wallace Spence, for this fine contribution to the park gallery, and may the rumored addition to this handsome monument materialize, before many years have passed.

The acquisition of the plat known as the Mason property gives an attractive addition to Druid Hill, and makes the Northern Central Railway our boundary line on the north and east without a break to Woodberry. The construction of a line of drainage from the mansion to the Run at West Woodberry is a source of congratulation, as it relieves the mansion and its vicinity of all sewage and effectually prevents the contamination of springs and streams. We would refer to the improvements carried out at the sheepfold and property-yard, also to the reconstruction of certain fountains; to the improvements on roads and paths, etc., and to the erection of new keepers' boxes at several of the park gates.

An attractive addition to the park was made during the year in the gardening department by the construction of handsome foliage beds along the eastern side of upper Mount Royal avenue.

At Patterson Park we have to record the completion of the handsome and commodious "Casino," with its

approaches and surroundings. The conservatory has also undergone thorough repairs, and the gardening department deserves much credit for the handsome display of beds during the season. We would also mention the construction of the new carriage entrance at Gough street, a great convenience to those driving through the park.

Work on the extension has progressed slowly for want of funds, still it is approaching completion, and as the sod is forming on the new surfaces it is protected measurably from damage whilst in its unfinished state. The new lake has proved its capacity to hold water, and is easily kept filled through the boat lake in the old park.

At Federal Hill there is nothing special to note except the removal of the Saulsbury houses lately purchased by the city for the park, and the erection of a new marble fountain near Warren avenue.

At Riverside nothing but routine work has been done as is the case with Johnston Park, Collington Park, and the Mount Royal Terraces.

At Carroll Park all improvements have been pushed ahead and much progress has been made. The main drive is completed. Several acres of the old surface have been regulated, paths constructed, trees and shrubs set, and the place kept in excellent order. The flower-

beds were unusually handsome, but the park is so inaccessible that comparatively few people ever see it. Strangers occasionally call to look over the old mansion which is considered an interesting relic. The rear entrance on the south side has been rebuilt in marble during the past season, and sets off the old house. The present kitchen building should be removed as soon as possible, and something erected in keeping with the architecture of the old house.

With this very general summary of work done, we respectfully refer you for details to the report of the General Superintendent and Engineer, and for the financial status to that of the Treasurer.

REPORT

——OF THE——

General Superintendent and Engineer.

BALTIMORE, December 31, 1893.

To the Public Park Commission:

GENTLEMEN:

I beg leave to submit herein my report for all parks under the control of the commission for the year 1893, respectfully referring you to the monthly reports for matters of detail.

DRUID HILL PARK.

(671.21 Acres).

ENTRANCES.

The beautiful entrance to the park by the way of Eutaw place extended was completed during the year by the removal of the old gateway and the erection of a new structure of granite and iron in keeping with the situation. This was the finishing stroke to the entire remodeling of that section of the park, inaugurated and

nearly completed during the previous year. The condition of Eutaw place extended from North Boundary avenue to the park entrance was so bad when the season opened, and complaints became so frequent, that an effort was made to have it repaired by the City Commissioner's Department. This resulted unsuccessfully, and in June the Park Commission took it in hand. Fortunately good gravel was to be had within a reasonable distance, and the entire roadway was torn up, resurfaced and rolled for a distance of 1,200 feet, at an outlay of $600. This puts the Eutaw place entrance and its approach in a satisfactory condition, the only thing not done being the completion of the new gatehouse, due to the want of the special glass ordered and the removal of the old house, which is to be set up at the Pimlico entrance. The completion of the embankment on the Callow property along the new South road in April enabled us to construct the Park avenue entrance and erect the present temporary gateway at that point.

As the extension of streets to the park boundary lines on the south and west, with the accompanying building improvements, goes on, the demand for new entrances will be made. This I consider a matter of great importance. An unlimited number of entrances will be very detrimental to the beauty of the park; will break up the boundary lines, interfere with the enjoyment of the interior driveways, and increase very greatly

the number of caretakers and watchers. This is one of the arguments in favor of an exterior boulevard into which all surrounding streets will lead, and thus make it easier to regulate the number and position of entrances into the park proper.

DRIVEWAYS.

No new driveways of importance have been constructed during the year. Upon the completion of the Callow embankment in April, the new south road was finished, guttered and fenced. Repairs have gone on since then as usual throughout the entire system as the wearing effects of travel and weather require the yearly addition of new material and the use of the steam roller. During April the south side of the lake drive was recoated, one of the heaviest of the road repairs made during the season. In May the roadway into the sheepfold was taken in hand, entirely rebuilt and drained.

FOOTWAYS.

The south side footway, from Eutaw place entrance to Mount Royal gate, was completed and surfaced with No. 4 crushed stone, the latter part of April. During the same month the eastern Mount Royal footway was straightened and rebuilt in connection with the new flower beds; the western footway was rebuilt in October, so that at this date Mount Royal avenue is in excellent

condition from end to end. During the month of August the stone footways on Swann avenue were finally completed, after frequent delays. The work was admirably done, and the delays, I believe, were beyond the control of the contractor. The very steep footways leading to the Maryland building from the south, also those at the Silver Spring have been paved with small pebbles, which protect them from ruinous washing, and harmonize with the surroundings. All footways are now in good condition.

TABULATED STATEMENT.

Blue-stone flagging laid on Swann avenue, new	1,670 sq. yds.
Blue-stone flagging laid on Swann avenue, relaid	743.5 "
Pebble paving	1,214.6 "

DRAINAGE.

The south main drainage line constructed last year has shown no weak points, and has at no time been overcharged with water even after the heaviest storm, as the ravine to the south of the park is now being filled up, it is an indispensable line to us. During the current year we have entirely reconstructed the drainage around the sea lion pond, substituting a broad paved surface gutter in place of the underground pipes which had an insufficient grade to clear themselves. Quite

an extensive piece of drainage was put in near Council Grove Station, which enabled us to fill in and obliterate a very ugly ravine through which in wet weather a stream found its way; the same plan was pursued at the sheepfold ravine, the drainage from which, is now entirely underground. The little valley above the base ball ground leading to the boat lake was also thoroughly drained by cutting off numerous small springs, fed no doubt by the boat lake, and which kept the ground marshy. The most extensive and important (bit of) drainage executed during the year, was that from the Mansion House to the run at West Woodberry, this does away with cess-pools, and makes the contamination of springs and water courses in the park impossible. The line is 2,200 feet long, with manholes, grease traps, flushing arrangements and all appliances to keep it in order. A good deal of minor drainage has been laid during the year not necessary to specify. The following is a tabulated statement of drain pipe laid:

4-inch	terra cotta	.....	6	feet.
6 "	"	.....	183	"
8 "	"	.....	1,594	"
10 "	"	.....	42	"
12 "	"	.....	138	"
15 "	"	.....	114	"
4 "	cast iron	.....	189	"
8 "	"	.....	900	"
			3,166	feet.

In connection with the piping there were built

No. 1 inlets	6
Manholes	11
Grease traps	1

In addition to the above underground drains there have been laid surface drains as below:

28-inch stone gutters	5411.8 feet.
12-inch brick gutters	358.8 "

The extension of the water-pipe system, mainly for the watering of new flower beds, led to the following additions:

1-inch	galv'd	iron	pipe	301 lineal feet.
1½ "	"	"		1181 "
2 "	"	"		72 "
3 "	"	"		84 "
3 "	cast	"		12 "
				1,650 "

The great bulk of this pipe was laid to reach the Mount Royal flower beds.

SUPPORT WALLS.

The only work done on support walls during the year was the completion of the south wall along the Brooks' property, by the setting in place of 1,178.4 lineal feet of eight-inch coping, which could not be had

in time during the previous season; this completed the work.

FENCING.

The following are the amounts constructed during the year:

Six-feet picket fence along Mason property	830	lineal feet.
Six-feet picket fence in other places	636	"
New guard fence 27 inches high	3,771	"
Old guard fence repaired	1,860	"
Steel wire fence with iron posts	480	"

The woven steel wire fencing with iron posts has proved very valuable. It does not obstruct the vision, and is a perfect protection, in one case stopping a runaway double team without injury to the horses or to itself. It is 6 feet 4 inches high, and costs, erected, from fifteen to eighteen cents per lineal foot, whilst the six-feet wooden picket fence costs from twenty-five to twenty-nine cents. We have now 1,117 lineal feet of it in use, and I would recommend its application to those boundary lines where a wooden picket fence obstructs the view. Its durability is very great, and its adjustability perfect. I would not put it along the Northern Central Railway; the pickets are better for such out of the way places.

SUNDRIES.

Drinking Fountains.—The Mountain Pass Spring fountain being in bad order, the masonry was taken down and rebuilt substantially, the springs were uncovered and cleaned out, the pipes leading to the fountain relaid and renewed where necessary, thus increasing the supply; bronze lion-heads were placed over the outlets. In connection with the reconstruction of this fountain the paths, gutters and drain-pipes in the vicinity were all put in good order and several improvements carried out.

A very fine spring situated in the woods back of the repair shop was piped 165 feet, and thus brought within a reasonable distance of the roadside, where a stone fountain was built for it, being in full sight of passers-by. It is much used now, especially by the employees of Clipper factory.

The little old brick city fountain on the stone path to the mansion, having but one nozzle and being out of date, was replaced with a neat stone fountain of inexpensive stonework, with two nozzles coming through bronze lion-heads.

Buildings.—Four new keepers' houses have been erected during the year; one at Fulton avenue gate; one at Eutaw place entrance; one at the sea lion pond, and one of large size, for the two shepherds, at the sheepfold. As

we are to place the former Eutaw place house at Pimlico gate, we will have but one old house left, viz., at Green Spring gate. The new storehouse at the sheepfold was finished early in the year; the annex to sheepfold proper has been rebuilt, and a closet for feed added to the mule shelter; the fences inside and out have been regulated; the water supply better distributed; all houses and fences painted, and every precaution taken to prevent or put out a fire. A second rustic arbor was erected at Silver Spring, to match the first, and covered with wild grape vines.

The pavilion at west end of Druid lake was moved in June to make way for the Wallace statue.

Mason Property.—During the month of July we were fully occupied in clearing out the Mason property of nine acres, which had just been acquired and in putting up the line fence along the Northern Central Railroad. This is a handsome addition to the park and contains two or three good springs. An iron horse-rack was erected in Grove No. 8, and the rack in No. 3 reset and extended, as this is a much frequented spot. The overhead electric light wires were removed during the year from the lake drive and Swann avenue and an underground cable substituted, but the destruction of the Brush power-house by fire in October has put an end to our electric lights, with the exception of the lamp at Mount Royal entrance, which is fed by the United

States Company. On the night of August 28th a severe storm occurred which blew down thirteen large trees and mutilated thirty-eight; one heavy limb, from an oak near by, crushed a gable of the Maryland building; it took forty men and eighteen horses five days to gather up the rubbish and dispose of it. By July the 1st we had put in the foundation for the Wallace statue, the pedestal progressed slowly until November, when it was finished and the statue set. On November 30th the unveiling and presentation took place, with appropriate ceremonies. This is a noble work, and a generous gift to the park; the proportions are heroic, and, being of bronze, it is imperishable; its size is fully in accord with its position and surroundings; it is to be hoped that the erection of the Washington, Columbus and Wallace statues may lead to other gifts of the same nature; I think, however, that all exposed statues should be of bronze.

Show Animals.—The collection of animals and birds has been as attractive as usual during the year and has been kept in good condition. The bear pit, with the addition of an awning which was stretched over it during the hot weather, has proved entirely satisfactory. It is true that one bear escaped over the gate, but this cannot well occur again, as the opening has been closed. The old bear pit is now the abode of a large family of raccoons. I regret to report the death of the puma, a very handsome animal; but we are not

prepared to accommodate wild animals, other than bears, of so large a size. They must have exercise, and our cages are too small. The birds are always attractive, easy to keep and economical in food.

Water Supply.—Whilst we can get along comfortably under the present supply probably for some little time to come, it may become necessary to carry out some such scheme as is indicated in my monthly report for December of this year, viz., combining a water tower and observatory on Druid Hill,

A very large amount of painting has been done during the year, all buildings needing it; much fencing and most of the benches have received attention. A new furnace has been placed in the local Superintendent's house.

The natural history collection and the curiosities in the Maryland Building needing attention, under instruction from the Committee of Supervision the services of Mr. Marshall were secured, and he is now at work cleaning, repairing and putting the entire collection in order. There is a great deal of unoccupied space in this building, and any additions of good material to the collection could be easily accommodated and would be acceptable.

GARDENING.

A large amount of work has been done in this department during the year, especially out of doors.

In accordance with the orders of the Committee on Improvements, plans were matured for converting the east side of Mount Royal avenue where the space permitted, into a series of plant beds. With a view to this, we prepared in March to move all shrubs and trees which interfered; most of the trees were transplanted to the border line of Mount Royal avenue, taking the places of dead or dying specimens; the shrubs were mostly sent to other parks with some small ornamental trees. In April the new beds, seven in number, and about 50 feet each in diameter were laid out, excavated, filled with soil and prepared for planting. The designs were handsome and by mid summer they were filled out and satisfactory, considering the rawness of the soil, which it will take several seasons to put in the best condition. Some 1,200 lineal feet of pipe had to be laid, with plugs, to supply these large plats with water. The rhododendron plat in the hollow was also reconstructed and fenced with steel wire, the rhododendrons being gathered into the four corners, whilst a very large foliage bed was made in the centre. All this work took a large force of men and carts and about 500 cubic yards of soil and manure. In addition to the above, the ordinary routine work all over the park was carried on faithfully. The filling in of the low ground at the intersection of Druid Hill avenue and park terrace was also completed, after which it was soiled and sowed. As the filling in had killed all the maples along Druid Hill avenue, new maples of the Norway

variety were set out in their places. The palm house has been kept in excellent order, and no difficulty was experienced in keeping up the requisite temperature in the palm house and propagating house during the very severe winter of 1892 and 1893. Preparations have been made to replace 700 feet of the arbor vitae hedge along Mount Royal avenue with California privet in the spring of 1894. It has been found impossible to keep the arbor vitae hedge alive, abreast of the Northern Central Railway shops, the privet is said to be smoke proof.

PICNICS.

Captain Cassell reports 852 permits issued with an average attendance of 300. Three were from Pennsylvania, two from Washington, and one from Delaware. Total attendance 255,600.

Six hundred and ten permits were issued for base-ball. Very little trouble was experienced in handling these large crowds and good order prevailed, although we never have over seven city officers in the park.

SOUTH-DOWN FLOCK.

The sheep have sustained their reputation and we have no difficulty in disposing of all we can spare. The sale of bucks has realized $240. The flock now numbers 120 head, including the English buck, and is well housed and cared for.

DEER.

The deer remain about the same in number, although some escape during the night probably through the gates. We have realized $115.70 by the sale of the surplus of old bucks, which have to be killed off when they become two numerous.

ARRESTS.

Total number during the year thirty-five, of these eighteen paid fines; the rest were dismissed or committed in default.

Before closing it may be of interest to know that we have of driveways 15.17 miles; of footways 13 miles; of bridle paths 2.5 miles.

These are map measurements, but are sufficiently correct for any practical purposes.

PATTERSON PARK AND EXTENSIONS.

(106 Acres.)

BUILDINGS.

The Casino.—Work was resumed on this building on January 30th, after six weeks of inactivity due to continuous cold weather; the work was prosecuted steadily until July 30th, when it was completed. The work was faithfully done and every requirement of the design carried out; it presents a handsome and commodious

appearance, and is comfortable and convenient in every respect for the purpose intended; the upper story presents a suite of apartments which would be attractive as a residence to any one. The park office, in the basement, is now furnished and heated by a stove, and is in almost daily use; we use also another portion of the basement as a tool house, it being slatted off from the cellar of the future lessee. The closets were thrown open to the public during the summer and were thoroughly tested. All drainage of every kind from the Casino is carried to the Harris Creek sewer, the soil pipes unite in a sealed well a short distance to the eastward, from which a single ten-inch pipe leads to the sewer; access to this pipe line is readily had for flushing or cleaning by man-holes.

The Conservatory.—This building has been almost rebuilt during the year, excepting such portion as was renewed in 1892. The dome was thoroughly decayed, and had to be trestled up during the winter of 1892 and 1893. As soon as the carpenters were far enough advanced the painting and reglazing began. At this date the building is in excellent order, and has received two coats of white lead inside and outside.

All other buildings in the park are in good condition. The observatory is as attractive as ever, and shows no signs of wear. The bath-room and closet arrangements at the local Superintendent's house were modernized

during the year, made necessary by the wornout condition of things.

Gough Street Entrance.—A new gateway of granite and iron for both carriages and foot passengers has been put up at this point in place of the old foot gate. This is a recognized improvement, there being no carriage entrance between Pratt street and Eastern avenue. The adjustment of grades at this point required considerable care, but it was made satisfactory, and the junction between the gateway and Patterson Park avenue was laid with asphalt blocks.

Driveways and Footways.—A new road was made from Gough-street gate to the main drive, with the necessary footways, gutters and drains, completing the new entrance and changing the aspect of the place very much for the better, in addition to its convenience.

The driveway or approach with a turning circle has been finished to the eastern front of the Casino. This involved a great deal of shaping to connect neatly with the entrances to the basement and portico, but with the aid of the granite curbing which we took up at the Broadway square, and asphalt blocks, everything fits well and is convenient. The footway connection on the western front is not yet complete but will soon be with fair weather. The drainage around the Casino is all complete and the iron horse rack will soon be in place. A new footway was made from opposite the Burke-street entrance to near the stable.

Drainage.—One of the heaviest pieces of work during the year was the drainage of the Patterson Park avenue pavement from Gough street to Eastern avenue, involving the resetting of the kerb, relaying the pavement and straightening the boundary rail; a shell trench was made two feet deep the entire distance at the foot of the park slope, and drained at intervals into the gutter through the granite base, with pipes; the pavement, which before was boggy, is now dry and everything is in shape.

The drainage at Eastern-avenue entrance was also altered and perfected.

SUNDRIES.

On account of the repaving of Baltimore street with sheet asphalt along the north side of the park, we were obliged to relay the pavement almost the entire distance to match the new kerb.

All buildings requiring it have been painted, also guard rails. One hundred and twenty-five tons of six-inch ice were stored last winter for summer use.

Six tons of hay were cut and put away during the summer.

GARDENING.

The conservatory is in good condition and filled with flourishing plants, some of which will soon be too large for the house. The propagating house now contains

50,000 well-rooted bedding plants for the coming summer. The outside beds during the past summer were very beautiful, although the season was not a propitious one, especially for Coleus. The nursery is well filled with plants and trees for future use, and all dead specimens in the park have been replaced. We were much aided in our improvements during the year by the 30,000 bricks taken up from the Broadway Squares to make way for the cement pavement laid there. The following is a tabulated statement of some of the work done:

Brick gutter laid	1,060 lineal feet.
Terra cotta drain-pipe laid	830 lineal feet.
Iron drain-pipe laid	595 lineal feet.
Asphalt block laid	525 square yards.
New drain wells built	12
New benches made	50
New guard fences built	725 lineal feet.

The electric lights were reinstated within a month after the burning of the Brush works, and have been lit ever since.

Arrests during the year were twenty, twelve paid fines and eight were committed.

Extension.—But little work could be done during the severe weather at the beginning of the year, and on January 17 the force was laid off on account of the ex-

haustion of the appropriation. The City Council, however, made an additional appropriation of $10,000, and on March 21 we resumed work with a moderate force and continued until October 21, when all hands were discharged. The work done during the year has consisted of the soiling, sodding and seeding of the upper and middle terraces on the northern and western sections of the park; in the reshaping and sodding of a portion of the Western Esplanade; in grading and shelling the drive from the Esplanade to Eastern avenue and thence to Chesapeake street. We also extended the middle and upper terraces to the southward, soiling and sodding the slopes and seeding the level spaces. We were engaged on this last work when the appropriation gave out.

The following drain-pipe was laid and the inlets built:

6-inch	terra	cotta	.....	218	feet.
12 "	"	"	.....	696	"
18 "	"	"	.....	294	"
Total			.....	1,208	feet.

PLANTING.

The large trees planted by Mr. Littlejohn in the northeast corner of the extension in 1892 did not succeed, eight of them dying; these have been replaced in accordance with his agreement. In addition to these

sixty-six young trees in variety have been set out, and eight groups of flowering shrubs, 113 in all, have been planted around the new lake at prominent points. Preparations have also been made for several groups of evergreens, which are now in the nursery, for spring planting. On November 16, by order of the Committee East, the extension was placed under Mr. Anderson's control and twelve men added to his force for extension work. These hands have been steadily employed in stoning the main driveway from the Esplanade to Eastern avenue, and have made good progress.

THE LAKE.

The lake has been full all the year until the coming on of winter and possible skating made us lower it to the safety line. The lowering of a lake with riprapped and puddled shores is risky to the lake. The draining out of the water from the embankment and the subsequent freezing and thawing of the puddle is dangerous to its stability, and hereafter we will have to keep it full and take other measures to insure the safety of the public. The lake has shown itself thus far perfectly tight and is easily kept full.

My estimate is that it will take about $15,000 to finish the extension. In the meantime, we will push along with our present force.

FEDERAL HILL PARK.

(8.25 Acres.)

No work of special moment has been done at Federal Hill this year, and the slopes which have for years been a constant source of labor and cost have shown no signs of further movement. The three Saulsbury houses purchased by the Commission on Hughes street, at the foot of the eastern slope, were sold for $150, the purchaser tearing them down and taking away all the materials. We have since then filled up the cellars, including an ancient beer vault, and regulated the surface. The new marble fountain near the Warren avenue entrance was erected in September by Sisson & Sons; the plumbing was all done, and the supply laid on early in October. During the summer the Water Department, upon application, increased our supply by putting in a larger pipe much to the benefit of the watering facilities of the park. The Brush Company renewed its lamp poles during the season. All dead trees have been replaced, also ninety flowering shrubs and one hundred and forty rose plants were set out during the year. The small force employed was fully occupied during the growing season in routine work. All buildings, (except the Observatory), benches, urns and railings have been painted, and the park is in excellent order.

RIVERSIDE PARK.

(17.28 Acres).

Little else than routine work has been done at Riverside this year, and a small force employed. We have had for some time so little water pressure that application was made to the department for a new connection, which was given, but without much result in water. All buildings needing it have been painted. In addition to routine work the following improvements have been made:

New brick guttering.....	2,481	lineal feet.
Old gutter relaid.....	654	"
New drain wells built....	4	"

Planting.—All dead trees have been replaced and 109 young specimens set in the nursery for future use. All of these came from the woods near the city. One hundred and twenty rose bushes have been added to the beds near the fountain. The park is in excellent order, and is fully appreciated by the residents in that section. The new gateway at the northwest corner sanctioned by the committee on improvements is still in abeyance on account of want of funds. The two fine horses which supply all the animal power for Riverside and Federal Hill are in excellent condition. They have the best of quarters in the Riverside stable.

JOHNSTON PARK.

(2.58 Acres.)

During January, February and March the time of the Local Superintendent was fully occupied in keeping the walks clear of snow and ice, including the outside pavements; this park is such a thoroughfare for pedestrians that it must at all times be kept clear under foot. When the spring opened the usual routine of grass cutting, trimming, planting, etc., began and continued until last autumn.

During October the city reset the curb lines on Chase street, and regraded the surface for sheet asphalt; this compelled us to relay four hundred square yards of pavement. Fifty new park benches were received from Patterson Park, where they had been made; these were anchored, and all the old benches reanchored. All benches, guard fences and flower vases were painted.

PLANTING.

The retinospora hedge around the centre bed having died during the summer, it was replaced with box. Dead trees were removed, and in November the summer beds were set with bulbs for spring flowering.

One arrest was made during the year and dismissed on payment of costs. This is a good record for a park

that has been a good deal troubled with disorderly characters. Johnston Park is one of the most attractive of the small parks of the city, and is a great source of pleasure to the neighborhood. The electric lights were relit shortly after the Brush fire, and have burned steadily ever since.

COLLINGTON PARK.

(5.14 Acres.)

Nothing has been done at this park during the year in the way of construction work. The routine work of mowing the grass and watering the surface has been faithfully carried out by the one man employed. The opportunity to purchase a lot of excellent soil in the immediate vicinity at ten cents per load was availed of, and 599 loads were hauled and piled up in the park for future use. Fifteen young trees were set out in November, and fifteen additional holes dug and prepared for future planting. The park, as far as constructed, is in excellent condition.

MOUNT ROYAL TERRACES.

(2 Acres.)

As in the others parks much labor was expended during January, February and March in keeping the foot-ways clear of snow and ice, especially the very extensive pavement which borders these terraces. We

also had repairs to make to bursted water-pipes. In April one hundred new shrubs and hedge plants were set out to replace stock killed by the severe winter, and by dust and smoke. The balance of the season was principally given to routine work, including the relaying of three hundred and twenty feet of damaged brick gutters. In November the side walk oaks, which were fast failing, were removed to other parks and sycamores planted in their places. Also the hedge of retinospora in the western square had to be removed for the same reason, and was replaced with a species of hardy Hawthorne. The dust, smoke, and bleak northern exposure of these terraces is trying to most vegetation. Before the winter set in a good top dressing of stable manure was spread over everything. One man, with an assistant during the season, attends to these terraces.

CARROLL PARK.

(19.72 Acres).

The improvements carried on during 1892 have been actively continued during the year just closed, as is evidenced by the present condition of the park. Every branch of the work has received attention so as to insure harmonious development. The force during the working season averaged fifteen men and three to four hired carts per day. As much of the gravel and soil used has been obtained outside it involved a great deal of hauling, much of it over considerable distances.

ENTRANCES.

In the undeveloped condition of the surrounding territory no improvements have been necessary in this respect, and the two wooden gateways, the northwestern and the eastern, will be quite good enough for some time to come.

DRIVEWAYS.

The main drive has been finished and now makes the circuit of the park. Fourteen hundred and fifty lineal feet were made in 1892, and 2,235 during the past year, giving a total length of 3,685 feet. This drive is twenty-five feet wide, with easy grades, and has involved a good deal of heavy cutting, including some blasting. It is well surfaced with the best gravel we could obtain in the neighborhood, including the yield of a gravel pit opened in the park itself, which is now being gradually filled up with refuse earth.

FOOTWAYS.

Seven hundred and twenty-eight feet of new footway have been made and gravelled, giving easy access to all points of the grounds.

DRAINAGE.

The main drive has been guttered with brick throughout the greater portion of its length, including such inlets and underground drains as were considered neces-

sary. Very careful attention has been given to this important matter as it involves the preservation of the work from injury by heavy rains. It is tabulated below:

Terra cotta pipe laid 6 inches, 8 inches, 10 inches and 12 inches.....	1,740 feet.
Brick gutter constructed.....	3,878 "
Inlets or drain wells built.....	17 "

THE MALL.

The old shooting range has been utilized as a mall by regrading it 24 feet wide; the target wall at the western extremity has been torn down and rebuilt with a parapet three feet high, which protects a seat 35 feet long, and commands an extensive view to the south and west. This is a much frequented place in the summer time, and is very cool and pleasant; the ditch for the protection of markers has been filled in, thus forming a promenade east and west of about 400 feet in length; at its eastern end it connects with the old north and south mall leading to the mansion.

SUNDRIES.

During the year about 7½ acres of surface, including new slopes have been graded or regulated and sodded or seeded; wherever the grass had worn out and weeds abounded the surface has been ploughed or spaded up

and left for the action of the weather until next spring, when it will be harrowed and seeded. The amount of sodding done is 2,068 square yards. A cart and wagon shed has been built on the low ground 12 feet by 25 feet. Guard railing constructed, 403 feet.

The mansion has been kept in excellent order, some damage to shutters was done by a violent storm which was at once repaired. The delapidated stone platform and steps, forming the south entrance to the mansion, have been replaced with a plain substantial entrance of veined marble in keeping with the house. The pavilion is in good order and all out-houses also. As we had no stable on the place, a stall for the horse was constructed in the basement of the pavilion, which answers every purpose. The new horse purchased during the year has proved an excellent animal.

GARDENING.

The flower beds planted this year were very successful and as beautiful as a careful selection of plants and close attention could make them. They numbered 22. The 13 vases were filled during the season with choice varieties of vines and plants. The nursery has been extended and four hot beds constructed which are now filled with bedding-plants for next summer. The nursery contains 635 trees and shrubs of good quality for future planting. 325 trees and shrubs were set out in the park this fall, many of the trees from the woods south of the Baltimore and Ohio Railroad.

Five arrests were made during the season, but no park fines laid. We are still without the police call which we so much need at this park, isolated as it is from any chance of rapid communication with the police station.

Before closing I beg leave to call attention to the importance of such legislation as will enable the Commission to give its day officers and local superintendents the power of arrest. I believe your Honorable Body has the matter in hand.

It gives me great pleasure in closing this report to testify to the faithfulness and industry of all the local superintendents in your employment. I have never had under me a more satisfactory corps of assistants. I must not forget my Assistant Engineer, Mr. Bollman, who takes great interest in his work and is most efficient. Thanking your Honorable Body for the ready support and assistance always rendered in the execution of my duties, this report is

Respectfully submitted,

C. H. LATROBE,

General Superintendent and Engineer.

DRUID HILL PARK INVENTORY.

Buildings.

Mansion,
Local superintendent's house,
Palm house,
Propagating house,
Maryland building,
Stone dwelling,
Repair shop,
Barn and wagon shed,
Camel shed.
Hatching house,
Filtering house,
Monkey and bird house,
Sheepfold and mule shelter,
Storage shed,
Bear den,
Raccoon den,
General superintendent's office,
Music pavilion,
13 Shelters,
15 closets,
11 keepers' boxes,
Engine house and crusher.

Show Animals.

3 Macaws,
10 Parrots,
1 South American Turkey,
13 assorted birds,
10 California Quails,
5 Cockatoos,
2 American Eagles,
13 Paroquets,
1 Booby Owl,
8 North American Geese,
2 Badgers.
2 Wolves,
7 Raccoons,
1 Musk Rat,
4 Ferrets,
14 English Rabbits,
4 Black Bears,
3 Camels,
21 Prairie Dogs,
6 Monkeys,
1 Sea Lion,
2 Ant Bears.

Southdown Flock.

120 head, 3 shepherd dogs.

Work Animals.

19 Mules, 8 Horses.

Rolling Stock, Machinery, Etc.

1 jagger,
9 water wagons,
1 water cart,
1 night cart,
2 two-horse rollers,
1 steam roller,
3 Philadelphia lawn mowers,
2 Champion hay mowers,
2 drays,
2 hay rakes,
85 iron benches,
1 outfit of gardening tools.
1 outfit of grading tools.
1 buggy,
1 lumber wagon,
1 express wagon,
19 dirt carts,
1 one-horse roller,
3 hand rollers,
26 wheelbarrows,
1 stone crushing plant,
1 snow plow,
1 tire shrinker,
1,440 slat benches,
1 outfit of carpenter's tools.

PATTERSON PARK INVENTORY.

Buildings.

Local superintendent's house,
Observatory,
Conservatory,
Propagating house,
Carpenter shop,

Boat-house,
Ice cream saloon,
Icehouse,
Stable and wagon shed,
3 Keepers' boxes,
Toolhouse,
Gatehouse tower,
4 Pavilions,
Taurus fountain Pagoda,
Wheelbarrow shed,
Water station,
Blacksmith shop and utensils,
2 Shelters,
6 Closets.

Show Animals.

1 Macaw,
2 Peafowls.

Work Animals.

4 horses.

Rolling Stock, Machinery, Etc.

1 jagger,
1 lumber wagon,
3 carts,
1 one-horse roller,
1 two-horse roller,
1 harrow,
3 plows,
2 hose reel carriages,
5,130 feet track,
1 outfit of grading tools,
1 express wagon,
1 watering wagon,
4 hand rollers,
3 hand lawn mowers,
4 horse lawn mowers,
1 champion mower,
1 cultivator,
23 dump cars,
1 brass marine pump,
1 outfit of gardening tools,
1 outfit of carpenter's tools.

FEDERAL HILL PARK INVENTORY.

Buildings.

1 tool house, 1 outhouse,
Observatory and pavilion.

Machinery.

1 horse lawn mower, 1 hand lawn mower,
1 outfit carpenter's tools, 1 outfit grading tools,
1 outfit of gardening tools.

RIVERSIDE PARK INVENTORY.

2 pavilions, 1 office,
2 cart sheds, 1 toolhouse,
2 outhouses, 1 stable,
1 wagon shed, 2 horses.

Rolling Stock, Machinery, Tools, Etc.

1 watering cart, 1 express wagon,
1 horse roller, 1 harrow,
1 horse lawn mower, 2 hand lawn mowers,
1 outfit of grading tools, 1 lot of terra cotta pipe,
1 outfit of gardening tools, 1 outfit carpenter's tools.

JOHNSTON SQUARE INVENTORY.

Buildings.

1 toolhouse and furniture.

Machinery, Tools, Etc.

2 hand lawn mowers,
1 outfit of carpenter's tools,
1 outfit of grading tools,
1 outfit of gardening tools.

MT. ROYAL TERRACES INVENTORY.

Toolhouse and furniture,
1 outfit carpenter's tools.
1 outfit grading tools,
1 outfit gardening tools,

CARROLL PARK INVENTORY.

Buildings.

1 mansion,
1 wagon shed,
2 outhouses,
1 tool house,
1 pavilion.

Rolling Stock, Machinery, etc.

1 wagon,
1 horse lawn mower,
1 horse roller,
1 outfit of grading tools,
1 outfit of gardening tools,
1 cart,
1 hand lawn mower.
1 hand roller.
1 outfit of carpenter's tools.

REPORT OF THE TREASURER.

DRUID HILL PARK.

Expenditures—Year ending December 31, 1893.

Pay rolls	$53,532 24
Plumbing	436 40
Office expenses	462 09
Carpentry	729 76
Sand and gravel	2,609 05
Bricks, stone, etc.	4,220 41
Fertilizers	1,571 15
Trees, shrubs and plants	718 02
Roofing and spouting	239 45
Cement	314 10
Bricklaying, etc.	1,363 37
Fuel	935 67
Paints and painting	1,012 16
Lumber	2,799 56
Masonry	864 31
Food for work animals	2,065 73
Electric lighting	5,185 32
Amount carried forward	$79,058 79

Amount brought forward	$79,058 79
Tools and hardware	728 98
Gas lighting	47 36
Food for show animals	1,037 83
Horseshoeing	506 00
Harness and repairs	113 40
Rubber goods	39 85
Repairs to wagons, carts, etc	243 90
Cart hire	1,148 87
Drain-pipe	100 66
Repairs to park machinery	194 65
Gate houses	786 37
Stove and iron work	737 74
Stone walk	6,134 44
Bear den	389 50
Pedestal for Washington's statue	803 75
Underground cable	2,993 93
Eutaw Place entrance gate	3,356 80
Miscellaneous	3,563 28
	$101,986 10

PATTERSON PARK.

Expenditures—Year ending December 31, 1893.

Pay rolls	$15,322 65
Stove and iron work	248 41
Harness and repairs	57 25
Tools and hardware	70 61
Repairs to park machinery	72 50
Fuel	597 70
Food for work animals	206 11
Horse shoeing	52 25
Fertilizers	61 50
Drain-pipe	72 72
Repairs to wagons, carts, etc	130 68
Office expenses	42 85
Gas lighting	51 01
Iron gates	1,181 25
Paints and painting	240 29
Stone, Bricks, etc	589 70
Electric lighting	1,737 00
Rubber goods	48 60
Trees, shrubs and plants	126 55
Lumber	500 23
Cement	24 80
Plumbing	634 76
Mansion House	29,947 80
Masonry	60 25
Miscellaneous	647 50
	$52,724 97

CARROLL PARK.

Expenditures—Year ending December 31, 1893.

Pay roll	$6,759 90
Fertilizers and top soil	381 30
Tools and hardware	151 05
Trees and plants	772 42
Plumbing and iron work	42 65
Lumber	165 37
Paints and oils	64 42
Drain-pipe	194 61
Cement	112 50
Bricks and stone	503 10
Horse feed	52 07
Rubber goods	27 40
Horse, harness and wagons	401 65
Masonry	153 37
Marble steps	300 00
Miscellaneous	18 79
	$10,100 60

RIVERSIDE PARK.

Expenditures—Year ending December 31, 1893.

Pay roll	$3,762 77
Horse feed	200 86
Lumber	20 49
Paints and oils	41 44
Bricks	134 25
Horse-shoeing	19 25
Horse and cart	243 00
Tools and hardware	37 80
Lamps	124 95
Plants	45 00
Plumbing	49 97
Stove and iron work	9 00
Miscellaneous	10 75
	$4,699 53

FEDERAL HILL PARK.

Expenditures—Year ending December 31, 1893.

Pay roll	$1,365 94
Paints and painting	529 48
Trees and plants	79 10
Lumber	17 59
Bricks	136 75
Roofing and spouting	40 00
Tools and hardware	11 96
Plumbing	15 34
Wire work	28 00
Advertising	11 75
Fuel	5 75
	$2,241 66

COLLINGTON SQUARE.

Expenditures—Year ending December 31, 1893.

Pay roll	$719 03
Stove work	9 00
Tools and hardware	2 08
	$730 11

JOHNSTON SQUARE.

Expenditures—Year ending December 31, 1893.

Pay roll	$1,224 29
Tools and hardware	31 49
Trees and plants	17 70
Lumber	33 17
Paints and oils	27 65
Paving	160 40
Wire work	9 75
Top soil	10 50
Miscellaneous	5 70
	$1,520 65

MT. ROYAL TERRACES.

Expenditures—Year ending December 31, 1893.

Pay roll	$1,134 56
Trees and plants	318 92
Tools and hardware	11 78
Plumbing	34 13
Rubber goods	13 50
Paving	64 00
Drilling holes	36 00
Paints and oils	14 25
Lumber	7 39
Miscellaneous	5 15
	$1,639 68

PATTERSON PARK EXTENSION.

Expenditures—Year ending December 31, 1893.

Balance due Park Board January 1, 1893		$ 6,864 01
Sale of junk		1 70
Appropriation		10,000 00
		$16,865 71
Pay roll	$ 15,550 42	
All other expenses	720 86	16,271 28
Balance		$594 43

THE IMPROVEMENT OF BROADWAY SQUARES.

Appropriation		$8,000 00
Cement pavement	$5,263 87	
Regrading and hauling;	662 00	5,925 87
Balance		$2,074 13

ACQUISITION OF LAND, DRUID HILL PARK.

(Paid from Surplus Sinking Fund).

Francis White	$30,220 40
Court costs, jury and condemnation expenses	2,074 60
	$32,295 00

BALANCE SHEET.

Year ending December 31, 1893.

	Dr.
To Interest on Patterson Park Extension Loan	$ 8,000 00
" Druid Hill Park	101,986 10
" Patterson Park	52,724 97
" Carroll Park	10,100 60
" Riverside Park	4,699 53
" Federal Hill Park	2,241 66
" Collington Square	730 11
" Johnston Square	1,520 65
" Mount Royal Terraces	1,639 68
" Ashland Square	124 81
" Broadway Squares, 1st Division	1,771 34
" Broadway Squares, 2d "	1,800 00
" Broadway Squares, 3d "	1,998 92
" Eastern City Fountain	1,500 00
" Eutaw Place Squares, 1st Division	1,779 19
" Eutaw Place Squares, 2d "	1,742 06
" Franklin Square	1,346 17
" Fulton Avenue Squares and Baker Circle	3,586 22
" Harlem Park	3,998 30
Amount carried forward	$204,290 31

BALANCE SHEET.

Year ending December 31, 1893.

	Cr.
By balance due Park Board, January 1, 1893.	$ 4,061 89
" Baltimore Traction Company	89,025 51
" Baltimore City Passenger Railway Company	66,853 80
" City and Suburban Railway Company	30,111 28
" Central Railway Company	18,763 37
" Lake Roland Elevated Railway Company.	8,170 62
" Sale of wood, Druid Hill Park	117 00
" Sale of old materials, Druid Hill Park	24 72
" Sale of sheep, Druid Hill Park	335 00
" Fines, Druid Hill Park	141 00
" Rent of stone dwelling, Druid Hill Park.	733 37
" Rent of Mansion, Druid Hill Park	1,500 00
" Sale of ice, Druid Hill Park	22 00
" Sale of venison, Druid Hill Park	115 70
" Privilege of fish propagation, Druid Hill Park	250 00
" Privilege of swings, Druid Hill Park	50 00
" Sale of wool, Druid Hill Park	85 20
" Boating privilege, Druid Hill Park	300 00
Amount carried forward	$220,660 46

BALANCE SHEET—Concluded.

	Dr.
Amount brought forward	$204,290 31
To Jackson Square	874 34
" Lafayette Square	3,398 51
" Madison Square	1,997 68
" Mount Royal Avenue Squares	2,986 13
" Mount Vernon Squares	1,700 00
" Park Place Squares	730 88
" Perkins Spring Square	1,000 00
" Taney Place Squares	299 13
" Union Square	1,059 95
" Wilkens Avenue Squares	1,616 44
" Balance	2,378 16
	$221,331 53

BALANCE SHEET—Concluded.

	Cr.
Amount brought forward	$220,660 46
By Sale of old gate house, Druid Hill Park.	5 00
" Rent of saloon and boating privilege, Patterson Park	200 00
" Swing privilege, Patterson Park	40 00
" Fines, Patterson Park	90 00
" Sale of old materials, Riverside Park	3 82
" Sale of old materials, Federal Hill Park.	152 25
" Rent of observatory, Federal Hill Park.	150 00
" Rent of saloon, Federal Hill Park	20 00
" Fines, Carroll Park	10 00
	$221,331 53

Respectfully submitted,

D. RAYHICE,

Treasurer.

ANNUAL REPORT

OF THE

Health Department

TO THE

MAYOR AND CITY COUNCIL OF BALTIMORE,

FOR THE

FISCAL YEAR ENDING DECEMBER 31, 1893.

OFFICERS AND EMPLOYEES

— OF THE —

BOARD of HEALTH of the CITY and PORT of BALTIMORE

FOR THE YEAR 1893.

HON. F. C. LATROBE, Mayor,
Member ex-officio.
JAMES F. McSHANE, M.D.,
President, Commissioner of Health and Registrar.
HIRAM L. SPICER, M.D.,
Assistant Commissioner of Health.
V. BURGESS HINES,
Secretary of the Board of Health.
GEORGE C. VANSANT,
Assistant Secretary of the Board of Health.

SIDNEY O. HEISKELL,
Resident Physician at the Quarantine Hospital of the Port of Baltimore.
JAMES D. STIDHAM, *Inspector of Plumbing.*
DENNIS HEALY, *Inspector of Drains.*
MICHAEL A. MALONEY, *Permit Clerk.*
HARRY C. ANDREWS, *Nuisance Clerk.*
JOHN T. SCHROEDER, *Clerk to Registrar.*
JAMES E. KING, *Recorder of Births.*
MONTGOMERY LAWRENCE,
Assistant Permit and Assistant Registrar's Clerk.

Sanitary Inspectors:

JOSEPH V. FITZPATRICK. HENRY M. McKEWEN,
CHRISTOPHER C. LEONARD, JOHN LONG,
JOHN M. DEGOEY, GEORGE N. LEWIS,
ROSS T. PENNINGTON.

Superintendents of Sewers:

HENRY PAFF, *Eastern Dist.* MARK F. GORMAN, *Western Dist.*

Superintendents of Public Cemeteries:

GEORGE RINEHART, *Eastern.* GEORGE E. BROWN, *Western.*

Superintendents of Night Soil Dumps:

JAMES QUINN, *Superintendent No. 1, Foley's Wharf.*
CHARLES F. RINGGOLD, *Superintendent No. 2, Winan's Wharf.*
FRANK KELLY, *Assistant Superintendent No. 2, Winan's Wharf.*
ERNEST TSCHUDY, *Detective.* SAMUEL RUSSELL, *Messenger.*
W. H. MURPHY, *Keeper of the Morgue.* DAN'L H. CARR, *Disinfector.*

CITY ANNEX.

Sanitary Inspectors:

D. S. WILLIAMS, M.D., GEO. W. PHILLIPS, *Twenty-first Ward.*
R. E. LEE HALL, M.D., J. C. LEGRAND COLE, *Twenty-second Ward.*

VACCINE PHYSICIANS.

First Ward:
WM. H. SCHWATKA, M.D., 2429 Lancaster street.
Second Ward:
N. L. DASHIELL, JR., M.D., 700 South Broadway.
Third Ward:
WM. H. JOHNSON, M.D., 1916 East Pratt street.
Fourth Ward:
C. F. MAGUIRE, M.D., 4 South Exeter street.
Fifth Ward:
ARTHUR WEGEFARTH, M.D., 805 Aisquith street.
Sixth Ward:
F. A. SAUER, M.D., 439 North Central avenue.
Seventh Ward:
G. H. CHABOT, M.D., 1111 East Preston street.
Eighth Ward:
J. B. SAUNDERS, M.D., 819 East Chase street.
Ninth Ward:
ELLIS MICHEAU, M.D., 407 South Sharp street.
Tenth Ward:
AUGUST HORN, M.D., 697 West Mulberry street.
Eleventh Ward:
J. A. GILLISS, M.D., 437 West Biddle street.
Twelfth Ward:
T. P. McCORMICK, M.D., 1421 Eutaw Place.
Thirteenth Ward:
WM. WOLF, M.D., 658 West German street.
Fourteenth Ward:
J. C. WUNDER, M.D., 1075 West Fayette street.
Fifteenth Ward:
WM. B. BURCH, M.D., 509 Hanover street.
Sixteenth Ward:
JOSEPH BLUM, M.D., 641 Columbia avenue.
Seventeenth Ward:
HENRY STARK, M.D., 1110 Hanover street.
Eighteenth Ward:
HARRY BOYD, M.D., 677 Columbia avenue.
Nineteenth Ward:
JOHN W. LINTHICUM, M.D., 1327 West Fayette street.
Twentieth Ward:
ALEX. L. HODGDON, M.D., 1235 Lafayette avenue.
CITY ANNEX.
Twenty-first Ward:
W. A. DUVALL, M.D., 2803 Rayner avenue.
Twenty-second Ward:
H. G. PRENTISS, M.D., 809 Gorsuch avenue.

REPORT

OF THE

COMMISSIONER OF HEALTH.

REPORT.

HEALTH DEPARTMENT,

BALTIMORE, January 2, 1894.

To the Honorable the Mayor and
City Council of Baltimore:

GENTLEMEN:

I have the honor to submit the annual report of the operations of the Health Department for the year ending December 31, 1893.

The mortality statistics shown by the tables accompanying this report exhibit an improved condition. The deaths during the year were 9,554, a decrease of 1,028 as compared with the preceding year.

The death rate for the year was 20.99 per thousand based upon the police census for 1890, a decrease of 2.26 per thousand as compared with the year 1892, and would show a smaller percentage if computed upon an estimated population, based upon the ratio of increase during the preceding decade.

The deaths from zymotic diseases, against which the efforts of all health departments are directed, show a

marked decrease, there being 1,548 deaths from these diseases as against 2,281 during the year 1892.

Diphtheria. The number of cases of diphtheria reported during the year was 252, a decrease of 501 as compared with 1892. The number of deaths resulting from diphtheria was 185, a decrease of 196 as compared with 1892.

Scarlet Fever. The number of cases of scarlet fever reported during the year was 406, a decrease of 2,307 as compared with the preceding year. The number of deaths resulting from scarlet fever was 36, a decrease of 222 as compared with 1892.

Croup. The number of cases of croup reported during the year was 94, a decrease of 149 as compared with the year 1892. The number of deaths resulting from croup was 24, a decrease of 23 as compared with the preceding year.

Measles. The number of cases of measles reported during the year was 1,043, a decrease of 2,613 as compared with the preceding year. The number of deaths from measles was 39, a decrease of 81 as compared with the year 1892.

Small-Pox. The number of cases reported during the year was 5. Number of deaths, 0.

Typhoid Fever. The number of deaths reported from this cause during the year was 224, an increase of 31

over the preceding year. This disease is not included in the list of diseases to be reported by law, and I earnestly suggest that the law be amended so as to include this disease.

Whooping Cough. The number of cases reported during the year was 129, an increase of 35 as compared with the preceding year. The number of deaths was 60, an increase of 28 over the year 1892.

Consumption. The deaths from consumption numbered 1,099, a decrease of 28 as compared with 1892.

Pneumonia. The deaths from pneumonia numbered 824, an increase of 6 over the preceding year.

Cholera Infantum. Four hundred and forty-four deaths were reported from this cause, a decrease of 217 as compared with the year 1892.

Varicella. The number of cases reported during the year was 23; there was one death from this cause in 1893.

Mumps. The number of cases reported during the year was 100. No deaths from this cause.

This is exceedingly good, particularly when taken in relation to an evidently increased population; and it is believed that a greater reduction can be made if certain sanitary suggestions be carried out, and the educational methods adopted in relation to scarlet fever and diph-

theria be amplified and extended to all the acute infectious diseases.

BIRTHS.

The total number of births reported during the year was 9,135, of which 7,914 were white and 1,221 colored. It is a matter of deep regret that the importance of this registration of births is not properly recognized by physicians and parents, and it is earnestly hoped that the law will be fully complied with in the future.

VACCINATION.

The work of the vaccine physicians is shown in detail in Table G.

I am pleased to be able to report the remarkable freedom of our city from small-pox, notwithstanding the fact that this disease was introduced into the city five times during the past year. Small-pox has also been reported at various times from cities and towns in daily communication, thus placing us in constant danger. This necessarily demanded that every preparation should be made for its arrest and development, and the work of the vaccine corps, in conjunction with the other measures adopted by the department, are evidences of the value of properly enforced regulations.

HOSPITAL FOR INFECTIOUS DISEASES.

The necessity for the erection of such buildings is becoming greater and greater every year. It is indeed

a lamentable fact that this great city cannot give shelter to such as suffer from the so-called milder infectious diseases. The city of Boston finding the accommodations for the care of cases of scarlet fever and diphtheria inadequate, have appropriated $287,000.00 for the erection of new hospitals for these particular diseases. This hospital is situated in a most delightful section of the city, known as East Chester Park. Some provision should be made for this class of cases, as the department is frequently reduced to sore straits to provide for at least the unfortunates who are compelled to seek public aid.

DISPOSAL OF GARBAGE.

I would urge upon your notice the advisability of a change in the manner of disposal of garbage. This department is constantly in receipt of complaints of the indiscriminate dumping of garbage and rubbish on vacant and sunken lots, and which interferes with the comfort of the adjacent residents, and is positively dangerous to health. The Commissioner of Street Cleaning accomplishes a great deal and really more than could be expected under existing regulations; but his service is inadequately equipped, and I trust will soon be provided with more modern methods.

PUBLIC BATHS.

I again renew the recommendation made heretofore concerning the establishment of public baths. The cost

of maintenance is small compared with the advantages derived from them.

PUBLIC DISINFECTION.

I again urge the construction of a public disinfecting plant. Bedding, carpets, wearing apparel, curtains, etc., from houses in which contagious diseases exist, should be properly disinfected under the supervision of this department, and this cannot be done with the methods now in vogue.

SEWERAGE.

It is hoped that the impetus given this subject during the past few years, and the appointment by the Mayor and City Council of a commission of civil engineers to inquire into this subject and report upon a plan best adapted to the needs of our city, will result in the rapid construction and early completion of a system to enhance our hygienic condition by the abandonment of the noxious privy pit.

FOOD INSPECTION.

Pure food is an essential element in the production of good health. The means of detection should always be at hand, and to do this the aid of the chemist and microscopist are needed. The methods in use are valueless, and conducted in a superficial manner, and scarce any protection from imposition is afforded the half

million inhabitants in this city. Legislation that will permit this department to enforce proper legal methods should be enacted.

INSPECTION OF PLUMBING.

The report of the Inspector of Plumbing shows an increase in the work of plumbing and a decrease in the construction of drains.

THE MORGUE.

This institution continues to demonstrate its usefulness, and the following report of the keeper shows the number of bodies cared for and the disposition made of them:

Bodies received 138
Males, 108; females, 30. White, 106; colored, 32.
Buried by relatives or friends 89
Buried by the city 46
Remaining in the Morgue 3
Number of bodies identified 130
Number of bodies unidentified 8
Number of post-mortems performed at Morgue 14
Total number of bodies received from March 11, 1891, (date of opening), to December 31, 1893 334

REPORT OF THE MEDICAL EXAMINERS.

The report shows that seventy-three post-mortems were made during the year.

The necessity for the passage of stringent regulations for the care and conduct of stables, and particularly dairy stables, is most urgent. It is important that every safeguard possible should be thrown around dairy stables, and the unclean and unscrupulous be made to appreciate the importance of proper sanitary requirements.

I would respectfully suggest that the work of cleaning or removing floating vegetable and other debris from the harbor and docks be taken from this department and placed under the supervision of the Harbor Board.

REPORT OF THE ASSISTANT COMMISSIONER OF HEALTH.

The report of Dr. H. L. Spicer, Assistant Commissioner of Health, shows in detail the work performed by the respective divisions of this department.

The following estimates for the expenses of the Health Department for the year 1894, have been carefully made up, and are absolutely necessary for the proper conduct of business:

Salaries	$39,300 00
General Health	18,000 00
Nuisances and sewers	16,000 00
Post-mortems	1,500 00
Quarantine hospital	20,000 00
Removing filth from docks	5,000 00
	$99,800 00

CITY ANNEX.

Salaries	$3,800 00
Nuisances and sewers	2,500 00
	$6,300,00

It is with feelings of sincere regret that I report the death of Mr. A. R. Carter, Secretary. He long filled this position in a most creditable manner, and I cannot refrain from expressing the regard in which he was held by myself and the employees of this department. As an associate in the office he was polite and kind, every ready to assist and full of sympathy. He was respected and loved by every one connected with the department, and his loss is deeply felt.

In conclusion, I return my sincere thanks to your Honor and the members of the City Council for the kindness and support always extended this department, and the gratifying results obtained are due to the valuable assistance given during the past year.

To all the officers of this department I feel deeply grateful for their earnestness and zeal in the performance of the various duties assigned them.

To the press of the city we are deeply indebted, as also the Police Department for the aid given in improving the sanitary condition of the city.

Respectfully,

Your obedient servant,

JAMES F. McSHANE, M.D.,

Commissioner of Health.

TABLES.

VITAL STATISTICS OF THE CITY OF BALTIMORE

For the Year 1893.

Population by Police Census, whites			384,394
" " " " colored			71,033
Total			455,427
Marriages, 4,482. Rate per 1,000 of population			9.85
Births (reported), white males	4,062		
" " " females	3,852		
Total white		7,914	
Births (reported), colored males	599		
" " " females	622		
Total colored		1,221	
Total males		4,661	
" females		4,474	
Grand total			9,135
Birth rate per 1,000 white population		20.60	
" " " colored "		17.19	
" " " whole "		20.07	
Still births, 770.			
Total mortality, native white males		2,853	
" " " " females		2,784	
Total			5,637
Total mortality, foreign white males		888	
" " " " females		845	
Total			1,733
Total mortality, colored males		1,105	
" " " females		1,079	
Total			2,184
Total males		4,846	
" females		4,708	
Grand total			9,554

Annual death rate per 1,000 white population	19.19
" " " " colored "	30.76
" " " " whole "	20.99

Total number of deaths from Measles	39
" " " " Scarlet fever	36
" " " " Diphtheria	185
" " " " Croup	25
" " " " Whooping cough	60
" " " " Typhoid fever	224
" " " " Typho-malarial fever	31
" " " " Cerebro spinal fever	59
" " " " Diarrhœa	102
" " " " Dysentery	62
" " " " Cholera infantum	444
" " " " Cholera morbus	35
" " " " Consumption	1,099
" " " " Pneumonia	824
" " " " Bronchitis	281
" " " " Influenza	62
" " " " Bright's disease	199
" " " " Cancer	249
" " " " Disease of Heart	431
" " " " Sun stroke	12
" " " " Pernicious anæmia	2
" " " " Appendicitis	12
" " " " Illuminating gas	14
" " " " Accidents	141

TOTAL NUMBER OF DEATHS FROM ABNORMAL CONDITIONS CONNECTED WITH PARTURITION.

Puerperal fever	13
" convulsions	21
" peritonitis	38
" septicæmia	25

Child-birth	22
Abortion	3
Hemorrhage of uterus	3
" post partum	2
" placenta prævia	2
Total mortality under five years of age	3,604
Percentage to total mortality	37.72
Total mortality diarrhœal diseases under five years	762
All ages diarrhœal diseases	983

DEATHS IN PUBLIC INSTITUTIONS.

Baltimore City Jail	2
Penitentiary	14
Hospitals and asylums	987
Total	1,003
Deaths reported by coroners, including inquests	682
Total autopsies	73
Bodies received at city morgue	138

V. BURGESS HINES,
Secretary Board of Health.

TABLE A.

Showing Number of Dwellings, Population, Total Number of Deaths, and Death rate per 1,000 in each Ward for Year 1893.

WARDS.	Dwellings.	Population.	Total Deaths.	Death rate per 1,000 in each Ward and of Total Population.
First	4,235	23,474	484	21.04
Second	2,511	19,415	387	20.36
Third	2,770	16,318	374	23.37
Fourth	2,821	16,400	307	28.18
Fifth	2,864	15,670	335	22.33
Sixth	5,541	28,145	745	26.60
Seventh	5,832	25,739	527	21.04
Eighth	4,740	26,682	506	19.46
Ninth	2,154	16,882	523	32.68
Tenth	2,654	16,147	329	20.56
Eleventh	3,821	21,269	441	21.00
Twelfth	5,595	25,426	581	23.24
Thirteenth	2,571	15,026	316	21.06
Fourteenth	3,402	18,062	356	19.77
Fifteenth	2,392	15,141	287	18.66
Sixteenth	2,533	14,838	246	16.40
Seventeenth	4,291	26,483	517	19.88
Eighteenth	5,218	27,487	551	20.40
Nineteenth	4,083	25,458	488	19.50
Twentieth	4,871	20,610	465	22.14
Twenty-first	3,334	16,428	291	18.18
Twenty-second	5,375	24,327	498	20.75
	84,247	455,427	9,554	20.99

V. BURGESS HINES,

Secretary Board of Health.

TABLE B.

Baltimore's Longevity during Year 1893.

424	White Male Decedents	between	70 and 102	years.	Total years	32,752,	averaging	77	years	2	months.
600	White Female	"	70 and 110	"	" "	46,656,	"	77	"	9	"
55	Colored Male	"	70 and 110	"	" "	4,306,	"	78	"	3	"
88	Colored Female	"	70 and 109	"	" "	7,091,	"	80	"	6	"
1,167	Decedents				Total years	90,805,	"	77	"	9	months.

V. BURGESS HINES, *Secretary Board of Health.*

Deaths from Zymotic Diseases, Consumption and Pneumonia, in Each Ward, for Year Ending December 31, 1893.

Zymotic Diseases.	Wards.																					Totals.
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
Croup	2	2	2	1	1	2	1	1	..	..	..	2	1	1	1	1	1	3	..	..	1	1	24
Cholera	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Cholera Infantum	35	39	12	16	8	34	23	11	8	10	29	12	8	15	14	17	40	34	11	21	15	32	444
Cholera Morbus	1	2	2	..	..	3	3	4	1	2	1	2	..	4	1	3	2	..	..	3	1	..	35
Diphtheria	13	3	5	6	8	12	18	15	2	9	6	2	6	8	6	2	12	13	8	6	13	12	185
Diarrhœa	12	10	1	2	1	7	4	2	3	5	5	7	3	5	3	5	3	6	3	7	5	3	102
Dysentery	9	4	2	2	1	4	2	5	4	..	2	2	2	1	..	..	7	2	3	4	1	5	62
Entero Colitis	18	3	7	9	2	13	3	5	13	5	1	2	2	2	3	2	5	4	2	4	3	9	117
Erysipelas	3	..	1	..	1	3	..	2	1	..	1	..	..	1	3	1	2	1	1	..	2	3	26
Fever, Cerebro Spinal	5	1	4	3	1	3	3	4	2	2	1	3	..	1	4	..	6	4	4	7	..	1	59
" Intermittent	..	1	1	..	1	2	1	..	..	..	..	1	..	..	1	..	1	1	1	..	..	..	11
" Malarial	4	..	..	..	..	2	2	..	..	1	3	1	2	..	..	..	1	3	6	..	1	2	28
" Puerperal	3	..	1	..	..	..	..	..	..	1	..	..	..	1	..	1	1	2	1	..	1	1	13
" Remittent	1	..	..	..	..	3	3	1	..	..	..	..	..	..	..	..	4	..	1	1	..	..	14
" Scarlet	1	2	..	..	3	3	6	1	..	..	..	1	..	3	..	..	..	8	3	3	2	..	36
" Typhoid	18	6	13	4	7	15	16	4	6	11	7	13	10	11	5	2	15	19	10	6	11	15	224
" Typhus	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

Fever, Typho-Malarial	3	7	1	2	..	3	2	..	..	..	..	..	2	1	..	..	3	3	1	1	2	..	31
Mumps	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Measles	3	4	3	1	..	..	1	3	3	..	2	5	..	..	3	1	1	1	1	1	2	4	39
Pyœmia	1	..	3	1	..	1	..	..	..	..	1	1	..	..	..	2	1	1	1	2	1	..	16
Small Pox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....
Septicæmia	..	1	..	2	..	5	..	..	4	..	..	..	2	..	..	1	..	..	1	1	..	..	17
Tonsilitis	..	1	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	1	..	4
Varicella	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Whooping Cough	2	..	1	2	..	1	2	..	2	2	1	2	3	25	..	..	2	4	3	4	2	2	60
Total Zymotic Diseases	134	86	59	50	34	116	90	58	50	49	62	56	41	79	44	38	107	109	61	71	64	90	1548
Consumption	38	22	49	35	41	93	77	78	58	36	61	46	31	44	44	33	50	64	52	63	34	50	1099
Pneumonia	45	39	28	26	38	74	41	33	28	34	34	44	22	29	25	26	69	47	41	32	24	45	824

TABLE C.

Annual Report of Deaths from all Causes in the City of Baltimore for the Year 1893.

Causes of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
Albuminuria	2	3	3	2	1	4	....	....	6	2	2	4	29
Angina Pectoris	3	1	2	1	3	2	1	1	1	....	1	8	24
Anuerism of Aorta	2	1	....	....	....	1	1	3	....	....	....	....	8
Apoplexy	15	20	24	26	32	19	22	11	9	19	19	26	242
Asphyxia	1	2	2	2	3	....	3	1	2	2	1	3	22
Asthma	5	6	6	4	6	3	8	3	4	5	2	7	59
Asthenia	8	6	3	1	2	2	8	5	4	7	4	6	56
Atrophy	1	....	....	....	1	....	....	....	1	....	....	....	3
Atelectasis Pulmonum	1	1	....	1	2	4	3	1	....	2	1	....	16
Ascites	....	1	1	....	2	1	....	....	....	....	2	2	9
Anæmia	....	....	1	....	....	1	2	1	.. .	1	....	2	8
" Pernicious	....	....	2	....	....	....	....	....	....	....	....	....	2
Appendicitis	....	....	3	...	2	....	....	2	1	1	2	1	12
Adenitis	....	....	....	1	....	....	....	....	....	....	....	....	1
Aphasia	....	....	....	....	1	....	....	....	....	....	....	....	1

Atheroma					2								2
Adynamia					1							1	2
Abortion						1		1		1			3
Abcess of Neck	1	1										1	3
" Liver		2					1						3
" Pelvis		1			1						1		3
" Spine		1											1
" Thoracie			1		1								2
" Laryngeal				1									1
" Intra peritoneal				1					1				2
" Hepatic					1	1		1			1		4
" Abdominal					1								1
" Maxillary					1								1
" Popliteal						1							1
" Psoas						2							2
" Cerebral						1				1			2
" Mastoid							1						1
" Foot										1			1
" Renal											1		1
" Hip											1		1
Bright's Disease	16	20	22	23	11	13	12	18	14	10	19	21	199
Burns	11	6	2	6	6	4	4	3	1	3	6	3	55
Capillary, Bronchitis	17	14	16	12	9	4	1	3	3	3	3	12	97
Child Birth	1	3	1	3	6		3		1	1	3		22

TABLE C—Continued.

Causes of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
Cirrhosis of Liver	4	6	6	3	3	2	2	5	7	5	7	2	52
Congestion of Brain	4	4	5	8	7	6	5	2	2	2	3	....	48
" Lungs	17	8	8	9	6	5	4	3	2	4	4	7	77
Consumption of Lungs	101	80	101	116	106	95	89	79	89	62	79	102	1099
" Bowels	....	....	....	....	....	....	....	2	....	....	....	1	3
Convulsions	29	25	31	31	19	14	22	17	18	12	17	24	259
" Puerperal	....	2	4	3	3	....	1	1	2	1	1	3	21
Croup	4	2	2	4	3	2	....	3	....	1	2	2	25
Cyanosis	7	6	4	3	3	10	5	3	....	4	1	6	52
Cholera Infantum	....	2	....	3	1	71	226	97	33	8	3	....	444
Congestive Chill	....	2	1	....	....	....	....	....	....	1	....	....	4
Cholera Morbus	....	....	1	1	....	3	18	7	3	....	1	1	35
Caries of Spine	....	....	1	....	....	....	....	....	....	....	....	....	1
Carbuncle	....	....	....	....	1	....	1	....	....	....	....	....	2
Calculus	....	....	....	....	....	1	....	1	1	1	1	....	5
Concussion of Brain	....	....	....	....	....	....	1	....	....	....	....	....	1

Catarrh									1				1
Cellutitis												1	1
Cancer of Face	3	1				1					1	2	8
" Stomach	3	6	6	5	5	6	6	8	8	10	8	9	80
" Breast	2	3	1		2	3	3	1	1	5	3	4	28
" Uterus	6	7	5	7	2	4	6	5	4	3	7	4	60
" Ovaries	1							1			1		3
" Bowels	1												1
" Tongue	1			1			1						3
" Rectum		1			1				2	2			6
" Diffused		1			1	1							3
" Hip		1											1
" Liver		1	1	2	2	4	1	2	1		1	1	16
" Pylorus		1			1								2
" Peritoneum		1							1				2
" Bladder			1	3			1		1				6
" Pancreas			1										1
" Neck			1		1		1					1	4
" Mouth				1		1				1			3
" Abdomen				1								2	3
" Sacrum				1									1
" Pelvis				1									1
" Oesophagus					1				1				2

TABLE C—Continued.

Causes of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
Cancer of Kidneys	....	....	....	....	2	1	....	....	....	....	2	....	5
" Leg	....	....	....	....	....	1	....	....	....	....	....	....	1
" Throat	....	....	....	....	....	....	1	....	....	....	....	....	1
" Larynx	....	....	....	....	....	....	....	1	....	....	....	....	1
" Vulva	....	....	....	....	....	....	....	2	....	....	....	....	2
" Foot	....	....	....	....	....	....	....	....	1	....	....	....	1
" Jaw	....	....	....	....	....	....	....	....	1	....	....	....	1
" Thigh	....	....	....	....	....	....	....	....	....	1	....	....	1
" Maxilliary	....	....	....	....	....	....	....	....	....	....	1	....	1
" Lip	....	....	....	....	....	....	....	....	....	....	1	....	1
Dentition	5	....	3	11	3	17	22	14	11	8	11	7	112
Diabetes	7	2	2	2	1	1	2	1	2	3	5	2	30
Diarrhœa	3	...	4	4	2	5	27	30	10	7	4	6	102
Diphtheria	27	9	19	15	20	9	9	6	13	13	26	19	185
Diseases of Heart	45	41	40	39	44	31	29	30	25	34	34	39	431
" Spine	....	....	....	....	....	....	1	1	1	1	1	1	6
Dropsy, General	3	....	4	3	1	....	2	5	3	3	5	3	32

Dropsy, Cardiac	....	....	1	1	....	....	....	....	....	....	2	1	5
Dysentery	4	1	2	....	4	5	22	11	6	3	3	1	62
Drowned	....	1	2	7	5	6	9	5	11	3	5	3	57
Debility	....	....	....	....	....	....	2	2	....	1	1	....	6
Dyspepsia	....	....	....	....	....	....	1	....	....	....	1	1	3
Delirium Tremens	....	....	....	....	....	....	....	....	....	1	....	2	3
Epilepsy	3	2	2	2	1	1	....	1	....	2	3	2	19
Endocarditis	3	1	3	8	2	4	4	3	2	5	3	4	42
Erysipelas	10	1	6	3	2	1	....	1	....	....	1	1	26
Embolism	1	....	....	....	....	....	....	1	....	....	....	....	2
Exposure	3	1	4	1	....	....	....	....	....	....	....	....	9
Enterocolitis	....	2	2	1	2	12	45	36	9	3	5	....	117
Epistaxis	....	1	....	....	....	2	....	....	....	....	....	1	4
Exophthalmia	....	....	....	....	1	....	....	....	....	....	....	....	1
Electric Shock	....	....	....	....	....	....	2	1	....	....	....	....	3
Fever Intermittent	....	....	2	2	....	1	3	....	....	1	1	1	11
" Malarial	1	3	2	4	3	3	4	5	3	....	....	....	28
" Puerperal	1	2	2	2	2	....	1	....	....	2	....	1	13
" Remittent	....	....	1	2	1	2	....	2	5	....	1	....	14
" Scarlet	1	....	....	....	3	1	4	1	2	1	12	11	36
" Typhoid	20	5	11	10	4	13	23	33	32	27	34	12	224
" Typho-Malarial	2	1	1	2	2	1	3	8	1	3	4	3	31
" Cerebro-Spinal	2	7	16	14	11	1	2	....	....	....	....	....	53
Fracture of Femur	1	1	....	1	....	....	1	....	....	....	1	....	5

TABLE C—Continued.

Causes of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
Fracture of Ribs	1	....	....	....	....	1	....	....	....	....	....	1	3
" Skull	2	1	....	1	3	....	1	2	3	7	2	5	27
" Clavicle	....	....	1	....	....	....	....	....	....	....	....	....	1
" Hip	....	....	....	....	1	....	....	....	....	....	....	....	1
" Vertebræ	....	....	....	....	....	....	1	....	....	....	1	1	3
" Leg	....	....	....	....	....	....	....	....	1	....	....	....	1
" Thigh	....	....	....	....	....	....	....	....	....	....	....	1	1
Gangrene	1	....	....	....	....	....	....	....	....	....	....	....	1
" of Scrotum	1	....	1	....	....	....	....	....	....	....	....	....	2
" Penis	....	....	....	....	....	....	....	....	....	1	....	....	1
" Senile	....	1	1	1	1	1	2	....	3	1	....	6	17
Gastroenteritis	6	5	4	9	8	14	36	20	11	4	7	8	132
Gall Stones	....	....	....	1	1	....	....	....	....	....	....	....	2
Gout	....	....	....	....	1	....	....	....	....	....	1	....	2
Goitre	....	....	....	....	....	1	....	....	1	....	....	....	2
Hernia	....	....	....	....	....	....	1	....	1	1	....	....	3
" Strangulated	1	1	....	1	1	....	....	....	....	....	4	1	9

Hernia, Umbilical						1						1	2
Hemorrhage of Stomach	1				1			1				1	4
" " Navel	1	3	1			1			1				7
" " Brain	5	8	4	4	3	4	7	4	2	2	7	10	60
" " Lungs	1	1	3	1	1		2		2	2	1	2	16
" " Uterus							1			1	1		3
" " Postpartum									1			1	2
Hydrocephalus	1	2	1	1	1	1	2	2	2	1	2		16
Hyperemesis	1	1									1		3
Hysterectomy	1					1						1	3
Hæmoptysis		1			1								2
Hodgkin's Disease		1						1					2
Hæmatemesis						1					1		2
Inanition	12	10	13	21	18	20	27	13	15	8	20	15	195
Insanity	1				1	1	1	2	1			1	8
Influenza	2	4	2	8			1				1	44	62
Intussusception	2	1	1		2	1				2	2		11
Intemperance	2	2	3	5	4	2	4	1	2	3		1	29
Indigestion		1	1						5		1	1	9
Ischuria			2			2	1						5
Inflammation of Brain	2	2	1	3	1	4		2		1	1	2	19
" Bladder	4	1	1	8	1	1	2	1	2	3	7	3	34
" Bowels	5	6	5	1	2	7	20	18	13	7	4	3	91
" Stomach	11	5	13	11	10	7	11	14	3	10	6	7	108

TABLE C—Continued.

Causes of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
Inflammation of Bronchi..	29	25	29	30	29	12	10	14	15	19	32	37	281
" Kidneys....	24	21	19	18	22	15	11	20	22	18	16	16	222
" Larynx	....	2	....	2	1	....	....	1	1	2	2	2	13
" Liver.....	3	1	....	4	2	3	2	1	....	....	2	....	18
" Pericardium	3	1	1	2	3	....	1	2	2	....	....	1	16
" Peritoneum.	4	4	14	8	5	6	9	6	2	4	4	7	73
" Pleura.....	3	2	2	4	2	....	....	1	2	....	3	5	24
" Tonsils.....	....	....	1	....	....	....	1	....	....	....	....	2	4
Jaundice.....	1	2	1	1	....	1	1	3	2	....	4	....	16
Laparotamy	....	....	1	1	3	1	....	....	1	1	1	2	11
Leucaemia	....	....	...	1	....	....	....	....	...	....	....	....	1
Leucocythaemia.....	....	....	....	....	....	1	....	....	....	....	....	....	1
Malformation.....	3	....	3	1	....	....	....	....	....	....	....	....	7
Marasmus.....	21	11	16	15	24	29	46	47	52	32	34	18	345
Measles.....	2	4	4	12	8	7	1	....	1	....	....	....	39
Meningitis	17	18	17	27	11	15	16	12	11	13	16	12	185
" Tubercular.....	6	5	7	8	8	4	6	4	6	5	2	4	65

Murder	3				2	1	2	1		1		2	12
Myelitis		1	1			1		1	1				5
Multiple Neuritis		1											1
Metro Peritonitis			1										1
Metritis			1										1
Menorrhagia					1								1
Melanæmia								1					1
Meningitis Cerebro Spinal										2	2	2	6
Neurasthenia	1	2	2	1	2		1						9
Necrosis			1					1					2
Old Age	46	27	37	26	23	26	26	27	22	13	33	23	329
Ovariotomy	2									1			3
Osteo-Sarcoma		1					1						2
Ostitis		1								1	1	1	4
Oedema of Glottis			1										1
Otorrhœa											1		1
Oedema of Lungs												1	1
Paralysis	22	20	31	30	15	16	22	17	15	15	20	19	242
Pneumonia	96	102	103	79	68	25	23	18	15	33	62	102	726
" Broncho	8	9	6	6	3	3	3	3		4	3	9	57
" Pleuro	2	2	1	3	3	2	3	2		1	1	1	21
" Typhoid	3	1	8	3			1			1	2	1	20
Progressive Locomotor Ataxia	1		2		1		1		2	1	1	1	10
Premature Birth	15	16	20	15	25	16	16	15	16	16	26	17	213

TABLE C—Continued.

Cause of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
Puerperal Peritonitis	8	7	5	2	4	3	....	....	....	....	5	4	38
" Septicæmia	5	3	2	2	2	3	1	1	1	2	1	2	25
" Metritis	....	....	....	....	....	...	1	....	....	....	....	....	1
Phrenitis	....	1	....	....	....	....	....	....	....	....	....	....	1
Placenta-Prævia	....	1	....	....	1	....	....	....	....	....	....	....	2
Pyæmia	....	1	2	1	2	....	1	1	1	2	2	3	16
Poison	....	....	1	....	1	1	1	3	....	....	1	1	9
Prolonged Labor	....	...	3	....	..	1	1	1	1	....	....	....	7
Prostatitis	....	....	....	1	...	....	....	....	1	....	1	1	4
Purpura	....	....	....	....	2	....	...	....	....	....	....	....	2
Phimosis	....	....	....	....	1	...	...	....	....	....	....	....	1
Perityphlitis	....	....	....	....	1	....	....	....	....	...	....	....	1
Pyosalpinx	....	....	....	....	....	1	....	....	....	....	....	....	1
Pott's Disease	....	....	....	....	....	...	1	1	....	....	....	....	2
Phlebitis	....	....	....	....	....	....	....	1	....	....	....	....	1
Pyosalpingitis	....	....	....	....	....	....	....	....	....	....	1	....	1
Pyelitis	....	....	....	....	....	....	...	....	....	....	....	1	1

Pityriasis												1	1
Rheumatism	6	3	3			2	2	2			4	4	26
" Inflammatory	1	5	2	5			5	1	2	1	2		24
Stricture of Bowels	4	3	4	2	1	3	2	1	2	2	1	3	28
" Pylorus	1				1			1					3
" Œsophagus				1									1
" Urethra					1								1
Scrofula	3		1	1		2	3	1		1	1		13
Softening of Brain	3	4	5	5	8	2		3	2	3	1	2	38
Suffocation by Illuminating Gas	1		2	1	1		1	1		4	3		14
Suicide	2	2	3	7	5	3	4	7	4	3	5	5	50
Septicæmia	1	3	2		2		1	4		1		3	17
Salpingitis	1								1				2
Syphilis		4	3	1	4	1	4	1	3	3	1	4	29
Scalds				1	1					1	1	3	7
Sun Stroke						2	5	5					12
Stomatitis						1	1						2
Synovitis								1					1
Trismus Nascentium	2	2	2	1	1		2	6	4	5	4	2	31
Tumor, Ovarian	3	1	1	4	2	1	1	2	1	1	2		19
" Cerebral	1									1			2
" Uterus		1											1
" Abdominal				1			1				1		3
" Thoracic							1						1

TABLE C—Continued.

Causes of Death.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
Tabes Mesenterica	....	1	....	....	....	....	....	1	....	....	....	....	2
Tetanus	....	....	....	....	2	1	....	2	3	....	2	1	11
Thrombosis	....	....	....	....	....	....	...	1	....	....	....	....	1
Tumor of Stomach	....	....	....	....	....	....	....	....	....	1	....	....	1
" Neck	....	....	....	....	....	....	....	....	....	....	....	1	1
Uraemia	1	4	5	2	....	2	3	....	1	2	2	2	24
Unknown, Adults	2	1	....	1	1	....	....	....	....	....	....	....	5
" Infants	1	3	1	1	....	....	1	1	....	1	1	1	11
Ulcer of Stomach	....	....	1	1	3	1	2	1	....	1	1	....	11
" Duodenum	....	....	....	....	1	....	....	....	....	....	....	....	1
" Rectum	....	....	....	....	....	....	....	....	....	....	...	1	1
Varicella	....	1	....	....	....	....	....	....	....	....	....	.. .	1
Whooping Cough	2	8	7	4	6	6	15	3	3	1	3	2	60
Wounds, Crushed	2	....	3	2	1	1	2	3	....	1	1	....	16
" by Cars	3	2	5	5	4	4	8	6	9	5	8	1	60
" by Fall	5	4	3	4	3	4	8	4	5	5	6	4	55
" by Pistolshot	...	....	1	....	1	....	1	1	1	....	1	1	7

Wounds by Stab.....	....	....	....	1	....	....	....	....	....	....	...	....	1
" by Gunshot.....	...	....	....	....	....	....	....	....	....	....	....	2	2
Grand total.....	846	731	853	854	765	711	1084	836	665	587	776	846	9554

TABLE C—Continued.

1893—Ages.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
Under 1 year.....	184	184	182	168	165	233	498	294	203	158	178	166	2613
Between 1 and 2 years.....	44	43	53	47	49	44	64	71	43	37	46	44	585
" 2 " 5 "	49	31	36	50	33	30	39	22	21	9	34	42	406
Total under 5 years.....	277	258	271	265	247	307	601	387	267	214	258	252	3604
Between 5 and 10 years....	25	16	23	23	21	15	22	22	26	19	28	17	257
" 10 " 15 "	10	17	8	21	14	11	17	19	16	9	15	9	166
" 15 " 20 "	25	19	27	28	28	30	34	31	38	18	35	26	339
" 20 " 30 "	64	63	80	91	58	54	59	64	56	63	51	79	782
" 30 " 40 "	82	62	88	82	64	62	53	61	41	44	77	68	784
" 40 " 50 "	73	64	75	71	61	63	61	64	63	54	78	89	816
" 50 " 60 "	88	58	71	76	70	44	69	49	54	52	68	81	780
" 60 " 70 "	82	76	94	89	78	55	68	64	43	58	62	97	866
" 70 " 80 "	70	67	71	61	90	44	66	51	38	38	67	79	742
" 80 " 90 "	43	29	39	39	30	23	31	18	21	16	32	45	366
" 90 " 100 "	5	1	5	8	4	2	1	6	2	1	5	4	44
" 100 " 110 "	2	1	1	....	....	1	2	....	....	1	....	....	8
Above 110 years	....	....	....	....	....	....	....	....	....	....	....	....	.....
Totals.....	846	731	853	854	765	711	1084	836	665	587	776	846	9554

NATIVITY.													
U. S.—White Males	260	205	239	254	211	220	356	267	194	181	227	239	2853
" " Females	233	212	247	245	221	200	336	245	201	171	219	254	2784
Foreign—White Males	78	74	62	84	84	63	83	63	56	62	81	98	888
" " Females	89	60	88	80	77	70	62	74	53	41	71	80	845
Colored—Males	84	96	112	93	92	72	135	94	73	73	92	89	1105
" Females	102	84	105	98	80	86	112	93	88	59	86	86	1079
Totals	846	731	853	854	765	711	1084	836	665	587	776	846	9554
Still-births	76	60	52	51	77	75	68	45	65	60	93	48	770
Marriages	357	346	332	382	315	473	292	325	394	502	415	349	4482
Births (Reported)	815	773	781	598	681	645	779	870	780	790	1025	598	9135

Population estimated by Police Census, 1890, White, 384,394; Colored, 71,033; total, 455,427. Total mortality during the year, United States, White, 5,637; Foreign, 1,733; Colored, 2,184; total, 9,554. Annual death rate per 1,000, whole population, 20.99; White, 19.19; Colored, 30.76. Total births (reported), 9,135; birth rate per 1,000 population, 20.07. Total marriages, 4,482; marriage rate per 1,000 population, 9.85; total still-births, 770.

TABLE No. C—Continued.

Total Number of Deaths Monthly in each Ward.

Wards.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
First	41	40	32	51	25	40	66	61	31	21	44	32	484
Second	27	26	31	33	24	30	49	43	29	26	33	36	387
Third	23	25	47	30	29	31	36	30	29	30	30	34	374
Fourth	19	20	15	29	36	27	34	33	30	13	22	29	307
Fifth	36	29	32	17	29	20	27	26	23	18	34	44	335
Sixth	67	59	64	62	57	55	82	64	62	52	57	64	745
Seventh	47	41	45	37	45	39	57	50	29	35	51	51	527
Eighth	60	41	44	47	50	32	49	28	39	29	35	52	506
Ninth	47	37	43	56	50	38	45	45	38	33	49	42	523
Tenth	37	24	39	24	27	24	30	25	22	21	27	29	329
Eleventh	48	35	33	41	30	35	58	42	25	21	34	39	441
Twelfth	51	45	58	43	57	51	53	37	48	46	53	39	581
Thirteenth	30	20	37	23	27	23	44	25	25	25	16	21	316
Fourteenth	28	37	33	28	12	19	54	31	22	20	35	37	356
Fifteenth	20	21	22	30	28	20	32	30	19	19	19	27	287

Sixteenth	28	19	31	22	10	20	27	23	14	15	17	20	246
Seventeenth	40	37	40	60	47	45	75	39	33	27	34	40	517
Eighteenth	50	51	48	62	39	42	58	39	35	30	40	57	551
Nineteenth	46	43	40	45	44	29	51	39	41	30	37	43	488
Twentieth	35	29	53	42	39	32	60	47	28	23	32	45	465
Twenty-first	26	18	21	28	24	23	38	28	11	22	33	19	291
Twenty-second	40	34	45	44	36	36	59	51	32	31	44	46	498
Totals	846	731	853	854	765	711	1084	836	665	587	776	846	9,554

TABLE C—Concluded.

Births.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
White Males	359	331	360	272	307	278	334	380	347	358	449	287	4,062
White Females	367	323	298	244	284	251	329	365	328	352	472	239	3,852
Total	726	654	658	516	591	529	663	745	675	710	921	526	7,914
Colored Males	48	59	54	42	39	59	61	54	51	41	59	32	599
Colored Females	41	60	69	40	51	57	55	71	54	39	45	40	622
Total	89	119	123	82	90	116	116	125	105	80	104	72	1,221
Illegitimate White	20	20	17	14	17	17	21	11	21	19	33	14	224
Illegitimate Colored	27	25	39	32	30	51	43	33	30	21	41	15	387
Total Illegitimate	47	45	56	46	47	68	64	44	51	40	74	29	611

TABLE 1.

General Health Account for the Year 1893.

DR. APPROPRIATION, $16,000. SALE OF VACCINE VIRUS, $7.00. TOTAL, $16,007. CR.

To 435 Warrants on Comptroller	$15,259 91	By 11 vouchers—Interments, removal of and destroying infected goods, etc., Eastern District	$2,062 50
		By 11 vouchers—Interments, removal of and destroying infected goods, etc., Western District	1,807 25
		By 12 vouchers—Coffins, Eastern District	958 75
		" 24 " Coffins, Western District	1,047 75
		" 10 " Bedding, etc.	217 65
		" 30 " Livery and shoeing	537 75
		" 33 " Supplies for Morgue, etc	310 17
		" 12 " Analysis of water	575 00
		" 43 " Post. stamps, cards, postage due	289 94
		" 37 " Vaccine virus	1,026 00
		" 14 " Papers and advertising	197 29
		" 30 " Sulphur and fumigation	220 90
		" 5 " Supplies and repairs on dump	43 50
		" 4 " Print, reports, type writing, etc.	721 10
		" 45 " Sundry small bills	199 05
		" 4 " Disinfectants, etc.	122 50
		" 9 " Telephone service and messages	298 40
		" 11 " Repairs on public cemeteries	476 26
		" 5 " Cleaning docks and sewers	563 91
		" 47 " Night soil detective	705 00
		" 22 " Wagons and repairs	654 78
		" 2 " Tools & implmnts. for cemeteries	41 20
		" 2 " Night soil work	60 00
		" 12 " Food supplied and clothing destroyed in infectious diseases	123 26
		Ordinance—Transferring to the account of nuisance and sewers	2,000 00
To 435 Warrants on Comptroller	$15,529 91	By 435 vouchers	$15,299 91
To unexpended balance	747 09	By unexpended balance	747 09
	$16,007 00		$16,007 00

V. BURGESS HINES, *Secretary Board of Health.*

TABLE No. 2.

Salary Account for the Year 1893.

Dr.		Appropriation, $39,200.		Cr.
To 12 Warrants on Comptroller	$39,200 00	By 1 voucher—January 1		$2,708 27
		" 1 " February 1		2,708 42
		" 1 " March 1		4,383 27
		" 1 " April 1		2,708 42
		" 1 " May 1		2,708 27
		" 1 " June 1		4,383 42
		" 1 " July 1		2,708 27
		" 1 " August 1		2,708 27
		" 1 " September 1		4,383 27
		" 1 " October 2		2,716 60
		" 1 " November 1		2,716 60
		" 1 " December 1		4,366 92
To 12 Warrants on Comptroller	$39,200 00			$39,200 00

V. BURGESS HINES, *Secretary Board of Health.*

TABLE 3.

Nuisance and Sewer Account for the Year 1893.

DR. APPROPRIATION, $14,000.00. FROM GENERAL HEALTH, $2,000.00. TOTAL, $16,000.00. CR.

To 173 Warrants on Comptroller	$15,842 05	By 50 vouchers	—H. Paff, sewer work	$ 7,358 63
		" 50 "	M. F. Gorman, sewer work	6,718 95
		" 12 "	Livery and shoeing	239 00
		" 19 "	Tools and repairs	266 88
		" 8 "	Rubber goods, etc	197 55
		" 1 "	Cleaning sinks	107 50
		" 1 "	Abating nuisances	81 00
		" 2 "	Lime	30 00
		" 2 "	Acids	124 00
		" 16 "	Pumping ponds	458 31
		" 2 "	Rent of shed	96 00
		" 1 "	Removing filth	17 65
		" 2 "	Barrels	9 40
		" 3 "	Salt	103 68
		" 3 "	Brooms	19 50
		" 1 "	Tent	14 00
To 173 Warrants on Comptroller	$15,842 05	By 173 vouchers		$15,842 05
To unexpended balance	157 95	By unexpended balance		157 95
	$16,000 00			16,000 00

V. BURGESS HINES, *Secretary Board of Health.*

TABLE 4.

Quarantine Hospital Account for the Year 1893.

DR. APPROPRIATION, $20,578.59. CR.

To 171 Warrants on Comptroller	$20,562 57	By 12	vouchers	Pay rolls	$12,571 00
		" 15	"	Provisions	1,787 02
		" 14	"	Groceries	1,028 86
		" 33	"	General supplies	870 53
		" 5	"	Insurance	314 15
		" 7	"	Fertilizers	158 80
		" 2	"	Shells	92 98
		" 14	"	Coal	855 60
		" 1	"	Towing	10 00
		" 2	"	Shoeing, etc	45 42
		" 9	"	Ice	137 60
		" 4	"	Medicine	46 23
		" 2	"	Furniture	49 67
		" 4	"	Lumber	171 81
		" 2	"	Flag, curtains, etc	41 50
		" 5	"	Clothing	104 20
		" 1	"	Paper	3 00
		" 7	"	Seed and implements	87 37
		" 2	"	Wagon and Harness	30 40
		" 1	"	Painting	170 50
		" 3	"	Feed	180 28
		" 26	"	Repairs, etc	1,805 65
To 171 Warrants on Comptroller	$20,562 57	By 171 vouchers			$20,562 57
To an unexpended balance	16 02	By unexpended balance			16 02
	$20,578 59				$20,578 59

V. BURGESS HINES, *Secretary Board of Health.*

TABLE 5.

Account for Removing Filth from Docks for the Year 1893.

Dr.		Appropriation, $4,000.00.		Cr.
To 25 Warrants on Comptroller	$3,999 87	By 15 vouchers—Pay Rolls		$3,668 60
		" 9 " Tools and Repairs		67 52
		" 1 " M. W. Adams		263 75
To 25 Warrants on Comptroller	$3,999 87	By 25 vouchers		$3,999 87
To balance unexpended	13	By balance unexpended		13
	$4,000 00			$4,000 00

V. BURGESS HINES, *Secretary Board of Health.*

TABLE 6.

Contract for the Removal of Refuse from Canning-Houses for the Year 1893.

Dr.		Appropriation, $5,000.00.	Cr.
To 2 Warrants on Comptroller	$5,000 00	By 1 voucher—M. W. Adams	$2,916 67
		" 1 " M. W. Adams	2,083 33
To 2 Warrants on Comptroller	$5,000 00	2 vouchers	$5,000 00

V. BURGESS HINES, *Secretary Board of Health.*

TABLE 7.

Salary Account for Post-mortem Medical Examiners for the Year 1893.

Dr.	Appropriation, $1,500.00.		Cr.
To 24 Warrants on Comptroller	$1,500 00	By 12 vouchers—N. G. Keirle, M.D.	$1,000 00
		" 12 " J. B. Schwatka, M.D.	500 00
To 24 Warrants on Comptroller	$1,500 00	24 vouchers	$1,500 00

V. BURGESS HINES, *Secretary Board of Health.*

TABLE 8.

Nuisance and Sewer Account, City Annex, for the Year 1893.

Dr.	Appropriation, $2,500.00.		Cr.
To 24 Warrants on Comptroller	$2,274 69	By 11 Vouchers—George Rinehart	$ 962 50
		" 11 " George E. Brown	959 00
		" 1 " M. F. Gorman	182 33
		" 1 " H. Paff	170 86
To 24 Warrants on Comptroller	$2,274 69	By 24 Vouchers	$2,274 69
To Balance unexpended	225 31	By Balance unexpended	225 31
	$2,500 00		$2,500 00

V. BURGESS HINES, *Secretary Board of Health.*

TABLE 9.

Salary Account for City Annex for the Year 1893.

Dr.	Appropriation, $3,800.00.		Cr.
To 12 Warrants on Comptroller	$3,799 80	By 8 Vouchers—A. R. Carter, Secretary	$2,433 24
		" 1 " George C. Vansant, Ass't Sec'y	416 64
		" 3 " V. B. Hines, Secretary	949 92
To 12 Warrants on Comptroller	$3,799 80	By 12 Vouchers	$3,799 80
To Unexpended balance	20	By Unexpended balance	20
	$3,800 00		$3,800 00

V. BURGESS HINES, *Secretary Board of Health.*

TABLE 10.

Statement of Appropriations to, Expenditures by, and Unexpended Balance of the Health Department for the Year 1893.

APPROPRIATIONS.	
Salaries	$39,200 00
General health	16,000 00
Nuisance and sewers	16,000 00
Quarantine	20,578 59
Post-mortem Medical Examiners	1,500 00
Removing filth from docks	4,000 00
Removal of canning house refuse	5,000 00
EXPENDITURES.	
Salaries	$39,200 00
General health	15,259 91
Nuisance and sewers	15,842 05
Quarantine	20,562 57
Post-mortem Medical Examiners	1,500 00
Removing filth from docks	3,999 87
Removal of canning house refuse	5,000 00
UNEXPENDED BALANCES.	
General health	$747 09
Nuisance and sewers	157 95
Quarantine	16 02
Removing filth from docks	13

TABLE 10—Concluded.

APPROPRIATIONS—CITY ANNEX.

Salaries	$3,800 00
Nuisance and sewers	2,500 00

EXPENDITURES.

Salaries	$3,799 80
Nuisance and sewers	2,274 69

UNEXPENDED BALANCES.

Nuisance and sewers	$225 31
Salaries	20

V. BURGESS HINES,

Secretary Board of Health.

REPORT

— OF THE —

Assistant Commissioner of Health.

REPORT.

HEALTH DEPARTMENT,

BALTIMORE, January 10, 1894.

DR. JAMES F. MCSHANE,

President of the Board of Health,
and Commissioner of Health:

SIR—I have the honor to submit the following report of the work performed by the Health Department for the year ending December 31, 1893.

The tabular statements annexed will give you a concise account of the various nuisances abated, also the work in general as performed by the employees of this department.

The Sanitary Inspectors have in every instance performed their duties with zeal and in a satisfactory manner, their duties requiring great discretion for the abatement of nuisances are based upon the facts and evidence contained in their written reports, and the result of personal inspection of premises complained of.

By reference to table A, it will be seen that they have made during the past year thirteen thousand one hundred and three (13,103) inspections. There have also been twenty thousand five hundred and six (20,506) mattresses destroyed from steamships arriving at this port.

The ordinance recently passed by the City Council, and approved by his Honor the Mayor, making a penalty on owners or agents of property upon notice of this department, to pave and repair alleys, that are considered in a state of nuisance will add greatly to the effectiveness of this department.

During the year ten thousand and seven (10,007) cart loads of refuse, filth, etc., were removed from the numerous sewers, inlets and covered gutters. Constant attention is being given to this work in order to keep them in as cleanly condition as possible. This work has been effectively and thoroughly performed. There were twenty tons of carbolate of lime manufactured and distributed by the Superintendent of Sewers.

Whilst the reports of the Vaccine Physicians do not compare (in point of the number of persons vaccinated) as favorably as the previous year, owing no doubt to the fact, that last year we were threatened with an epidemie of smallpox, yet it is gratifying to state that they have performed excellent work, and in a very satisfactory manner.

By reference to table G, you will please notice that the Vaccine Physicians have made during the past year forty-four thousand seven hundred and forty-one (44,741) calls, and vaccinated twenty thousand eight hundred and seventy-five (20,875) persons, a large percentage being primary vaccinations.

I respectfully call your attention whereby the department can be strengthened, its usefulness promoted, and the public greatly benefited; and that is the necessity where some power should be granted in this department, in order to enable it to enforce and regulate the inspection of all food products, specially as to the inspection of milk, an article of diet so extensively used, particularly for infants, but which, for numerous causes, is frequently rendered unfit for use.

In several instances during the past year has the attention of this department been called to contaminated milk, of which cognizance was taken and efforts taken to rectify the same. I trust, therefore, that the present General Assembly will grant such power to the City Council, in order to enable them to pass such ordinance or ordinances, that will protect this community in the future.

I desire to commend the employees of this department for their zeal and energy displayed during the past year.

To the Police Department the thanks of the department are rendered for their valuable aid and assistance.

In conclusion, accept my sincere thanks for the many courtesies extended to me.

Very respectfully,

Your obedient servant,

HIRAM L. SPICER, M.D.,
Assistant Commissioner of Health.

TABLES.

TABLE A.

Number of Nuisances Examined and Abated by Sanitary Inspectors During the Year 1893.

Alleys cleaned	204
" repaired	475
" paved	104
Premises cleaned	71
Vacant lots drained, filled and cleaned	185
Manure pits constructed	49
" " reconstructed and repaired	53
" " cleaned	74
Drain-pipes reconstructed and repaired	268
" " cleaned	41
" " laid	933
Yards cleaned	198
" drained	64
" repaired	221
" paved	52
Privies inspected and ordered cleaned	3,258
" reconstructed	218
" ventilated	31
Water closets repaired and ventilated	132
Excavating apparatus inspected	5
Cellars drained and filled	335
" cleaned	176
Slaughter-houses inspected	24
Stables reconstructed and cleaned	39
Amount carried forward	7,210

TABLE A—Concluded.

Amount brought forward	7,210
Water pipes and hydrants repaired	149
Gutters repaired	75
Rain-spouts reconstructed	98
Grass and weeds removed from gutters	178
Ice ponds examined and permits granted	9
" " " " " refused	....
Tenements ordered cleaned and whitewashed	200
Samples of pump-water examined	25
Cases of infectious diseases examined	2,835
Number of pieces of goods destroyed from infected houses	467
Number of pieces of goods disinfected at the fumigator	275
Causes of death examined	115
Steamships visited and examined	73
Mattresses destroyed from steamships	20,506
Scow loads of refuse, etc., removed from steamships and destroyed	42
Complaints examined and no nuisance found to exist	232
Infected premises fumigated	937
Miscellaneous	243
Total	33,609

HIRAM L. SPICER, M.D.,
Assistant Commissioner of Health.

TABLE B.

Number of Notices, Orders, etc., Issued from the Health Department, and Number of Official Letters Written and Received During the Year 1893.

Number of notices issued to clean privies	44,772
Number of notices issued to clean, repair, repave and pave yards	1,386
Number of notices issued to clean, bail, drain or fill cellars	1,192
Number of notices issued to clean, grade, pave and repair alleys	3,401
Number of notices issued to clean, drain or fill lots	1,073
Number of notices issued to reconstruct and ventilate water closets and privies	803
Number of notices issued to clean grass and weeds from gutters, sidewalks, streets, etc	979
Number of notices issued to clean and properly construct manure pits and remove manure	741
Number of notices issued to repair hydrants and water pipes	471
Number of notices issued to clean and reconstruct stables	509
Number of notices issued to construct proper drainage, repair and clean drain-pipes	654
Number of notices issued to disinfect premises	191
Amount carried forward	56,172

TABLE B—Concluded.

Amount brought forward	56,172
Number of notices issued to reconstruct and repair defective plumbing	528
Miscellaneous notices	276
Total	56,976
Number of permits issued to clean privies	70,014
Number of permits issued to clean privies at night	92
Total	70,106
Number of official letters written	657
Number of official letters received	689
Legal proceedings instituted for non-compliance with notices served	86

HIRAM L. SPICER, M.D.,

Assistant Commissioner of Health.

TABLE C.

Number of Interments in the Eastern and Western Public Cemeteries during the Year 1893.

EASTERN PUBLIC CEMETERY		WESTERN PUBLIC CEMETERY	
GEORGE RINEHART, *Superintendent.*		GEORGE E. BROWN, *Superintendent.*	
January	31	January	36
February	24	February	31
March	30	March	27
April	28	April	13
May	33	May	20
June	26	June	30
July	28	July	33
August	25	August	31
September	22	September	23
October	22	October	35
November	28	November	19
December	33	December	29
	330		327

Total number of interments during the year 1893 657

HIRAM L. SPICER, M.D.,

Assistant Commissioner of Health.

TABLE D.

Number of Dead Animals, etc., Removed in the Eastern and Western Districts during the Year ending December 31, 1893.

EASTERN DISTRICT.		WESTERN DISTRICT.	
GEORGE RINEHART, *Superintendent.*		GEORGE E. BROWN, *Superintendent.*	
Dogs	4,905	Dogs	4,926
Cats	5,365	Cats	6,791
Rats	4,987	Rats	5,963
Chickens	3,624	Chickens	5,207
Ducks	537	Ducks	278
Geese	73	Geese	37
Goats	17	Goats	28
Sheep	25	Sheep	17
Calves	17	Calves	11
Hogs	19	Hogs	29
Horses and Mules	5	Horses and Mules	6
Fish	9,547	Fish	10,602
Crabs	7,654	Crabs	8,723
Decayed Meats (lbs.)	365	Decayed Meats (lbs.)	2,374
Decayed Eggs (doz.)	873	Decayed Eggs (doz.)	642

Total number of dead animals	33,111
Total number of dead fowls	9,756
Total number of dead fish and crabs	6,526
Total number of pounds of decayed meats	2,739
Total number of dozens of decayed eggs	1,515
Total number of cart loads of vegetable and other offal removed from docks	1,074

HIRAM L. SPICER, M.D.,

Assistant Commissioner of Health.

TABLE E.

Showing the Amount of Night Soil Delivered at Foley's and Winans' Dumps for the Year ending December 31, 1893.

Foley's Wharf, Canton.	Loads.	Gallons.	Winans' Wharf, Spring Gardens.	Loads.	Gallons.
January...	269	53,800	January...	1,908	381,600
February..	461	92,200	February..	2,448	489,600
March	741	148,200	March	5,938	1,187,600
April.....	1,243	248,600	April.....	8,961	1,792,000
May	1,542	308,400	May	9,861	1,972,200
June.....	1,937	387,400	June.....	9,561	1,912,200
July	1,406	281,200	July	9,277	1,855,400
August....	1,060	21,200	August....	8,973	1,794,600
September.	780	15,600	September.	6,841	1,368,200
October...	540	10,800	October....	4,847	969,400
November.	462	92,400	November.	3,941	788,200
December.	594	118,800	December.	2,562	512,400
	11,035	2,207,000		75,118	15,023,600

Total number of loads delivered at both dumps..... 86,153

Total number of gallons delivered at both dumps..... 17,230,600

HIRAM L. SPICER, M. D.,

Assistant Commissioner of Health.

TABLE F.

Transcripts from the Births and Deaths for the Year Ending December 31, 1893.

FROM THE RECORDS OF DEATHS.

For pension claims	432
For life insurance claims	442
To prove death	76
To be sent to foreign countries	69
Total	1,019

FROM THE RECORDS OF BIRTHS.

For pension claims	110
To be sent to foreign countries	16
Total	126

HIRAM L. SPICER, M.D.,

Assistant Commissioner of Health.

TABLE G.

Report of the Vaccine Physicians for the Year Ending December 31, 1893.

Wards.	Physicians.	Offices or Residences.	Number of calls.	Number of vaccinations.	Primary.	Secondary.	Successful.	Failed.	Not heard from.	Males.	Females.	Whites.	Colored.	Revaccinations	Certificates of vaccinations given.
1st	Wm. H. Schwatka..	2429 Lancaster st...	1,625	600	288	312	9	.....	591	311	289	577	23	...	261
2d.	N. L. Dashiell, Jr..	700 S. Broadway....	1,209	779	444	335	399	45	335	350	429	734	45	...	1,068
3d.	Wm. H. Johnson...	1916 E. Pratt st	1,968	684	440	244	363	203	118	277	407	638	46	...	175
4th	C. F. Maguire	4 S. Exeter st.....	1,715	425	363	62	286	104	35	225	200	418	7	...	422
5th	Arthur Wegefarth .	805 Aisquith st	1,954	1,104	470	634	1,052	28	24	549	555	732	372	...	179
6th	F. A. Sauer.....	439 N. Central ave.	2,830	1,240	811	429	882	24	334	569	671	1,002	238	..	.....
7th	G. H. Chabot.....	1111 E. Preston st..	2,717	615	515	100	513	2	100	412	203	466	149	...	819
8th	J. B. Saunders.....	819 E. Chase st.....	2,403	738	414	324	442	11	285	424	314	641	97	...	899
9th	Ellis Micheau.....	407 S. Sharp st	3,464	1,581	167	1,414	725	67	789	578	1,003	681	900	...	.....
10th	August Horn	697 W. Mulberry st.	1,854	1,367	753	614	630	.....	737	742	625	683	684	...	458
11th	J. A. Gillis	437 W. Biddle st....	2,825	952	592	360	548	48	356	395	557	147	805	...	433
12th	T. P. McCormick...	1421 Eutaw Place...	1,826	699	439	260	463	119	117	306	393	331	368	14	146
13th	William Wolf.....	658 W. German st..	1,109	781	356	525	513	124	144	281	500	650	131	...	52
14th	J. C. Wunder.....	1075 W. Fayette st.	2,444	936	581	355	872	53	11	456	480	761	175	14	364
15th	W. B. Burch.....	509 Hanover st	1,604	988	243	745	311	100	577	653	335	493	495	...	379
16th	Joseph Blum	641 Columbia ave...	1,191	642	381	261	213	152	277	380	262	400	242	...	376
17th	Henry Stark.....	1110 Hanover st.....	5,125	2,946	1,221	1,725	2,901	45	.....	1,287	1,659	2,867	79	...	2,842
18th	Harry Boyd.....	677 Columbia ave...	1,654	1,296	581	715	549	136	611	736	560	1,142	154	...	458
19th	John W. Linthicum	1327 W. Fayette st.	1,304	388	336	52	97	16	275	210	178	296	92	...	110
20th	Alex. L. Hodgdon.	1235 W. Lafayette av	772	928	663	265	269	291	361	400	528	529	399	...	307
21st	W. A. Duval	2803 Raynor ave....	1,118	420	312	108	187	5	228	220	200	385	35	...	193
22d.	H. G. Prentiss.....	809 Gorsuch ave....	2,030	766	571	195	561	60	145	376	390	552	214	...	744
		Totals	44,741	20,875	10,841	10,034	12,785	1,633	6,450	10,137	10,738	15,125	5,720	28	10,685

Total number of calls..... 44,741
Total number of vaccinations..... 20,875

HIRAM L. SPICER, M. D.,
Assistant Commissioner of Health.

REPORT

—OF THE—

INSPECTOR OF PLUMBING.

REPORT.

HEALTH DEPARTMENT,

BALTIMORE, December 31, 1893.

JAMES F. MCSHANE, M.D.,

President of Board of Health,
and Commissioner of Health.

SIR:

I have the honor to submit the following report of work performed by me as Inspector of Plumbing for the year ending December 31, 1893.

The tables annexed will show in detail the number of permits issued and inspections made.

In conformity with the requirements of Section 7 of the ordinance regulating the work of plumbing, I most respectfully inform you that fines to the amount of fifteen ($15.20) dollars and twenty cents were imposed for violations.

Respectfully,

JAMES D. STIDHAM,

Inspector of Plumbing.

HEALTH DEPARTMENT,

BALTIMORE, December 31, 1893.

JAMES F. MCSHANE, M.D.,

President of Board of Health,
and Commissioner of Health.

SIR:

I have the honor to submit the following report of work performed by me as Inspector of Plumbing for the year ending December 31, 1893.

Number of permits issued for plumbing	1,990	
" " " " drain-pipes	933	
		2,923
" inspections of plumbing	2,506	
" " " drain-pipes	999	
		3,505
" " registered plumbers in the city		337

Respectfully,

JAMES D. STIDHAM,
Inspector of Plumbing.

TABLES.

TABLE No. 1.

Number of Inspections of Plumbing and Drain Work for the Year Ending December 31, 1893.

Months.			Months.			Totals.
January ...	Inspection of plumbing...	103	January ...	Inspection of Drains...	57	160
February..	" " ...	113	February..	" " ...	91	204
March	" " ...	243	March	" " ...	97	340
April.. ...	" " ...	213	April.. ...	" " ...	108	321
May	" " ...	212	May	" " ...	112	324
June.....	" " ...	297	June	" " ...	85	382
July.....	" " ...	211	July.....	" " ...	65	276
August....	" " ...	212	August....	" " ...	89	301
September.	" " ...	234	September.	" " ...	57	291
October...	" " ...	215	October...	" " ...	74	289
November.	" " ...	235	November.	" " ...	89	324
December..	" " ...	218	December..	" " ...	75	293
Total ...	.....	2506	Total ...	.....	999	3505

JAMES D. STIDHAM,

Inspector of Plumbing.

TABLE No. 2.

Plans Received and Permits granted for Plumbing and Drain Work during the year ending December 31, 1893.

Months.			Months.			Totals.
January	Plumbing work	91	January	Drain-pipes	62	153
February	" "	98	February	" "	87	185
March	" "	231	March	" "	93	324
April	" "	187	April	" "	76	263
May	" "	185	May	" "	109	294
June	" "	189	June	" "	101	290
July	" "	171	July	" "	65	236
August	" "	236	August	" "	71	307
September	" "	168	September	" "	37	205
October	" "	170	October	" "	87	257
November	" "	163	November	" "	88	251
December	" "	101	December	" "	57	158
Total		1990	Total		933	2923

JAMES D. STIDHAM,

Inspector of Plumbing.

REPORT

—OF THE—

QUARANTINE HOSPITAL OF THE PORT OF BALTIMORE.

REPORT.

QUARANTINE HOSPITAL,

PORT OF BALTIMORE, January 1, 1894.

To the Honorable the Mayor and
City Council of Baltimore:

GENTLEMEN:

I have the honor to herewith submit the report of the Quarantine and Pest Hospital for the year ending December 31, 1893.

It again becomes my duty to call your attention to the condition of the old Quarantine. Since the opening of the new Quarantine the old place has been under the supervision of the Quarantine Physician. Nothing in the way of repairs have been made; the buildings are in a most dilapidated condition, and the wharf attached is completely gone. If this place is to be retained as a hospital for the reception of contagious diseases from the city, it should be inspected by a committee from your Honorable Body and put in a condition for such service. If, on the other hand, it should be deemed impracticable to make the necessary repairs, I would

then earnestly recommend that it be taken from under the supervision of the Quarantine Physician, and some one be allowed to work the land for taking care of the place, and thereby save a considerable expense to the city.

Painting and repairing the buildings at the Quarantine Station will become necessary in the early spring. The Building Inspector has made an estimate of the cost of the same, and an appropriation for that purpose will be asked for.

The building of the disinfecting plant at this station will commence as soon as the weather permits, and will be ready for use the coming summer.

Notwithstanding the fact that cholera again made its appearance in several foreign ports that were in constant communication with us, no vessel with that disease on board arrived at this station; and out of a total of six hundred and sixty-two vessels boarded and inspected, it only became necessary to retain five, none of which had disease on board, but were held for observation, cleansing and disinfection. Six hundred and sixty-two vessels have been boarded and inspected during the year (see Table I), and from these vessels we have collected and paid into the city treasury the sum of $7,458.00. (See Table II).

Table III shows the number and class of vessels with sickness on board, or from infected or suspected ports

detained at Quarantine for cleansing and disinfecting. There was five in all.

By referring to Table IV, you will find that seven patients were treated at this hospital during the year, all of whom were sent from the city.

The cost of maintaining the Quarantine and Pest Hospital for the year was $19,983.98, as more fully shown by the Health Commissioner's Report. The appropriation was $20,000.00, which leaves a surplus of $16.02.

In conclusion, I beg to return my sincere thanks to Dr. H. B. Clark for his intelligent assistance, and that the employees of the place have performed their respective duties in a manner deserving of the highest praise.

Very respectfully, your obedient servant,

S. O. HEISKELL, M.D.

Quarantine Physician.

TABLES.

TABLE I.

Showing the Number and Class of Vessels Boarded and Inspected at the Quarantine for the Year ending December 31, 1893.

Months.	Class of Vessels.					
	Steamships.	Ships.	Barks.	Brigs.	Schooners.	Total.
January	2	....	....	....	....	2
February	3	....	....	....	....	3
March	4	....	....	....	....	4
April	36	....	5	2	....	43
May	47	1	5	1	53	107
June	46	....	7	1	61	115
July	63	....	6	....	34	103
August	72	....	4	2	13	91
September	57	....	4	....	10	71
October	43	1	3	1	8	56
November	31	....	11	1	22	65
December	2	....	....	....	....	2
Total	406	2	45	8	201	662

TABLE II.

Showing the Amount of Money Received for Quarantine Fees and Paid to the City Register for the Year ending December 31, 1893.

Months.	CLASS OF VESSELS.					
	Steamships.	Ships.	Barks.	Brigs.	Schooners.	Total.
January	$ 59 06	.....	.....	.....	.....	$ 59 06
February	57 18	.....	.....	.....	.....	57 18
March	96 37	.....	.....	.....	.....	96 37
April	527 35	.....	25 02	7 14	.....	559 51
May	629 93	$11 99	23 03	2 80	$176 38	844 13
June	694 43	.....	48 76	5 79	203 87	952 85
July	908 10	.....	41 04	.....	115 54	1,064 68
August	1,118 94	.....	30 33	9 23	60 85	1,219 35
September	980 73	.....	25 61	.....	48 35	1,054 69
October	764 82	12 96	13 44	2 33	31 91	825 46
November	487 33	.....	80 67	2 80	108 73	679 53
December	45 19	.....	.....	.....	.....	45 19
Total	$6,369 43	$24 95	$287 90	$30 09	$745 63	$7,458 00

TABLE III.

Showing the Number and Class of Vessels Detained at Quarantine for Cleansing and Disinfecting for the Year ending December 31, 1893.

Months.	Class of Vessels.					
	Steamships.	Ships.	Barks.	Brigs.	Schooners.	Total.
January	....	....	....	....	....	....
February	....	....	....	....	....	....
March	....	....	....	....	....	....
April	....	....	....	....	....	....
May	1	....	....	....	....	1
June	....	....	....	....	....	....
July	2	....	1	....	....	3
August	1	....	....	....	1	2
September	....	....	....	....	....	....
October	1	....	....	....	....	1
November	....	....	....	....	....	....
December	....	....	....	....	....	....
Total	5	....	1	....	1	7

TABLE IV.

Showing the Number of Patients treated at the Quarantine Hospital for the Year ending December 31, 1893.

Disease.	Remaining over from 1892.	Received in 1893.	Discharged in 1893.	Died in 1893.	Remaining in Hospital.	Total.
Small-pox	.....	3	2	.....	1	3
Quarantined	.....	4	4	.....	.....	4
Total	.....	7	6	.....	1	7

METEROLOGICAL SUMMARY

FOR THE YEAR 1893.

From U. S. Weather Bureau Records.

PRESSURE.

Mean Barometer.....29.86 inches, 20 below normal.
Highest Barometer.....30.69 " on December 14th.
Lowest Barometer.....29.97 " on October....13th
Range of Barometer..... 1.70 "

TEMPERATURE.

Mean Temperature.....53.5 degrees, 2.0 below normal.
Highest Temperature.....98 " on June 20th.
Lowest Temperature..... 1 " on January 16th.
Mean Winter (1892 and 1893) Temperature, 30.7 degrees, 6.7 degrees below that of 1891 and 1892, and 7.2 degrees below the normal.
Mean Spring Temperature.....51.5 degrees, 1.8 below normal.
Mean Summer Temperature.....74.7 " 1.1 " "
Mean Autumn Temperature.....55.7 " 1.3 " "
Mean Temperature of December .....38.6 " 5.2 above the mean Temperature of December 1892, and 1.6 degrees above the normal.

PRECIPITATION.

Total Precipitation during the year, 32.15 inches, 10.92 inches below the normal. Number of days on which rain or snow fell, 132. Greatest monthly precipitation, 4.43 inches, in February. Least monthly precipitation, 1.38 inches, in March.

WIND.

Prevailing Direction Northwest.

Highest velocity, 45 miles per hour, from the northwest, on February 19th.

Mean velocity, 8.0 miles per hour.

Total movement 69,922 miles.

First heavy frost in Autumn.....October 17th.
Last snow of the season 1892 and 1893.....March 4th.
First snow of the season 1892 and 1893.....November 9th.
Mean relative humidity..... 71 per cent.

C. P. CRONK, M.D.,
Observer Weather Bureau.

ANNUAL REPORT

OF THE

Water Department

TO THE

MAYOR AND CITY COUNCIL OF BALTIMORE,

FOR THE

FISCAL YEAR ENDING DECEMBER 31, 1893.

OFFICERS OF THE WATER BOARD.

DECEMBER 31, 1893.

COMMISSIONERS:

Hon. FERDINAND C. LATROBE, Mayor,
Ex-officio President.

D. MEREDITH REESE, *Secretary.*

WILLIAM A. MARBURG,

JOHN E. HURST,

JOSEPH S. HEUISLER,

CLINTON P. PAINE,

FRANCIS H. HAMBLETON.

WATER REGISTRAR:

E. SHRIVER.

ACTING CHIEF ENGINEER:

WILLIAM L. KENLY.

IN MEMORIAM.

WHEREAS, The death of ROBERT KIRKWOOD MARTIN, late Chief Engineer of the Water Department of Baltimore City, calls for some suitable expression of sorrow from this Board; therefore,

Resolved, That we have heard with the profoundest regret the mournful intelligence of the death of our esteemed friend, Mr. Martin, whose life for the past 36 years has been devoted to the service of this community in the construction and elaboration of a vast system of water works. To the discharge of his official duties as Chief Engineer he brought the fruits of a liberal education, a sound and practical knowledge of his profession, and a wealth of energy and determination which enabled him to surmount all difficulties and furnish Baltimore with a bountiful supply of pure water, so essential to the business interests, health and comfort of its people, and the public services thus intelligently and successfully rendered will always stand as the proudest memorial of his life's work.

Resolved, That we shall ever cherish the recollection of his genial and courteous intercourse with this Board, the gentle amenities which characterized his daily walks and conversation, his earnest and steadfast devotion to duty, and the simple virtues of honesty, fidelity and truth which so beautifully adorned his character.

Resolved, That we deeply sympathize with his widow in her sad bereavement, and earnestly pray that Almighty God may visit her with most abundant consolation.

Resolved, That these resolutions be entered upon the minutes of this Board, and also published in the daily papers, and that an engrossed copy of the same, signed by its President and Secretary, be transmitted to the widow of the deceased.

FERDINAND C. LATROBE, *President*,
D. MEREDITH REESE, *Secretary*,
WILLIAM A. MARBURG,
JOHN E. HURST,
JOSEPH S. HEUISLER,
CLINTON P. PAINE,
FRANCIS H. HAMBLETON.

REPORT.

BOARD OF WATER COMMISSIONERS—CITY HALL,

BALTIMORE, January 2, 1894.

To the Honorable the Mayor and
City Council of Baltimore :

GENTLEMEN :

In compliance with Ordinance No. 10, Section 3, March 27, 1862, the report of the Water Board is respectfully submitted herewith for the year ending December 31, 1893.

Per statement made in our report of January 2, 1893, there was a balance overdrawn and due the Mayor and City Council December 31, 1892	$44,239 66
Deduct cash in hands of Water Registrar December 31, 1892	2,199 79
	$42,039 87
Warrants issued during the year to pay disbursements	898,083 06
	$940,122 93

Amount brought forward		$940,122 93
Deducting from this amount the total net receipts for the year	$824,365 03	
Less cash on hand December 31, 1893	2,228 04	
		822,136 99
Leaves a balance of		$117,985 94

due the Mayor and City Council December 31, 1893.

This excess in deficit is occasioned by the heavy expense incurred by the break of Lake Clifton, completing the construction of Guilford Reservoir, the maintenance of the new pumping station at Gay and Oliver streets, and the many extensions of distributing mains the Board has been called upon to make.

The expenditures for repairs during the year were in excess of past years occasioned by the severe freezing weather of last winter.

The total net collections during the year were as follows:

From water rents, meter rents, plumbing bills and sundries	$764,562 37
From Mayor and City Council for appropriation for fire-plugs, pumps and fountains, and laying mains	7,100 00
From water tax	52,702 66
	$824,365 03
The collections for 1892, were	$836,480 36

The amount collected from passenger railways for plumbing work in 1892 was larger as compared with 1893, thus making the aggregate receipts less for the past year.

The 1893 water rents collected during the year show an increase of $11,300.71, as compared with 1892 rents collected in that year.

The receipts from meter rents in 1893 were $178,-292.67, an increase of $18,832.81 over receipts from same source in 1892.

The collection of delinquent water rents for the year 1893 show an increase of $7,717.72 over collections of delinquent rents in 1892.

The disbursements for the past year were as follows:

For working expenses, fire-plugs, fountains, etc.	$192,928 64
For distributing mains	161,657 49
For Guilford reservoir	30,866 93
For twelve months' interest on bonds	512,630 00
	$898,083 06

During the year Guilford reservoir has been completed, and the supply of water from same has been furnished to consumers at Waverly and vicinity.

The work at Lake Clifton is nearing completion.

There are now three forty-inch pipe lines intact from the gate house to the city and water flowing through them.

In providing for additional pumping capacity, the Board last June contracted with Henry R. Worthington, New York, for one ten million gallon high duty pumping engine, which will soon be erected at the eastern pumping station, and in the ensuing summer it is expected that an abundant supply will be kept up in the Middle and High Service reservoirs.

Applications for 2,668 houses and warehouses were made in 1893, together with applications for sundry other rents from which an additional revenue is expected of $18,277.50 annually.

The new revenue for 1892 was $15,654.50.

The number of new fire-plugs erected was 59, making a total of 1,474 fire-plugs in the city.

There are in the city 176 public fountains, eleven of which were erected in the past year.

We respectfully ask for the annual appropriation as required per ordinance, to reimburse the Board for its outlays made for fire-plugs and fountains.

The revenue taken from the 1894 ledgers and meter rents estimated, show the revenue for 1894 to be $807,446.09, with new supplies and water tax to be added.

The bonds issued in 1874 for four million dollars are redeemable after July 1st, 1894, viz: $263,000.00, at six per cent. and $3,737,000.00, at five per cent.

The interest on these bonds, paid out of the revenue of the department, amount to $202,630.00 per annum.

The Board is of the opinion that these bonds should be paid from the general sinking fund, and that your Honorable Body shall authorize the issue of a new loan in order that the Board can comply with the demand for larger and constant extension of mains and other improvements.

In the death of Mr. R. K. Martin, the late Chief Engineer, the department met with an irreparable loss, and the Board again expresses its appreciation of his merits, won by his ability, honesty and efficiency in his long, faithful service.

We respectfully refer you to the accompanying reports, with statements, of the Water Registrar and the acting Chief Engineer, giving full details of the working of each of their departments.

FERDINAND C. LATROBE,
Ex-officio President.

D. MEREDITH REESE,
Secretary.

WILLIAM A. MARBURG,
JOHN E. HURST,
JOSEPH S. HEUISLER,
CLINTON P. PAINE,
FRANCIS H. HAMBLETON.

Water Registrar's Report.

REPORT.

WATER REGISTRAR'S OFFICE—CITY HALL,

BALTIMORE, December 30, 1893.

To the Honorable the President
and Members of the Water Board:

GENTLEMEN:

The following statements are made to comply with City Ordinance No. 10, Section 8, showing receipts and disbursements for the year ending December 30, 1893, with additional statements, giving in detail the financial operations of the department for the year.

The receipts for the year were as follows:

From	1893	water	rents	.....	$414,596	41
"	1892	"	"	.....	130,431	12
"	1891	"	"	.....	7,412	09
"	1890	"	"	.....	2,675	49
"	meter rents			.....	178,292	67
					$733,407	78
Less discount on 1893 water rents				.....	35,016	46
					$698,391	32

Amount brought forward		$698,391 32
From interest on back water rents		2,994 91
" plumbing bills		58,384 27
" distributing mains		2,754 64
" Lake Montebello		103 79
" Loch Raven		331 05
" Lake Roland		1,366 16
" Eastern pumping station		14 28
" Pumps and fountains		3 00
" Jones' Falls conduit		40 80
" Fire plugs		2 00
" Hampden reservoir		62 60
" Lake Clifton		39 55
" Western pumping station		35 20
" Druid lake		5 20
" Guilford reservoir		33 60
" Appropriations by Mayor and City Council		7,100 00
" Water tax		52,702 66
		$824,365 03

The disbursements for the year were as follows:

Paid	Plumbing department	$45,725 89
"	repairs	34,138 07
"	Lake Montebello	3,924 35
"	current expenses	10,311 42
"	Western pumping station	15,958 50
"	Lake Roland	2,888 83
"	salaries	35,089 33
"	temporary supply	600 00
"	Hampden reservoir	1,751 18
"	Lock Raven	5,989 80
"	Lake Clifton	2,407 17
"	Druid Lake	1,885 33
"	Mount Royal reservoir	829 98
"	High Service reservoir	426 79
"	water courses	1,134 96
"	Jones' Falls conduit	164 25
"	stationery and printing	2,162 36
"	Eastern pumping station	17,517 36
	Working expenses	$182,905 57
Paid	distributing mains	161,657 49
"	fire-plugs, pumps and fountains	7,387 69
"	tools and fixtures	1,041 72
"	returned water rents	1,593 66
"	Guilford reservoir	30,866 93
"	Interest	512,630 00
		$898,083 06

The $44,239.66 due the Mayor and City Council December 31, 1892, was paid January 10, 1893, out of deposits with Register and not by warrant.

The following statements exhibit in detail the financial transactions of the department for the year 1893 :

Statement A, Water Registrar's cash account.
" B, " " disbursement account.
" C, trial balance, general ledger.
" D, balance sheet.
" E, receipts.
" F, disbursements by warrants.
" G, new supplies.
" H, abatements.
" I, comparative receipts.
" K, balances remaining on the books of the department, December 31, 1893.
" L, revenue.

Most respectfully submitted,

E. SHRIVER,

Water Registrar.

STATEMENTS.

STATEMENT A.

Water Registrar's Cash Account for the Year 1893

		Dr.	Cr.
To balance on hand December 31, 1892		$2,199 79	
To water rents, 1893	$414,596 41		
Less discount	35,016 46		
		379,579 95	
To water rents, 1892		130,431 12	
" " " 1891		7,412 09	
" " " 1890		2,675 49	
" meter "		178,292 67	
" interest on back water rents		2,994 91	
" plumbing bills		58,384 27	
" distributing mains		2,754 64	
" Lake Montebello		103 79	
" Loch Raven		331 05	
" Lake Roland		1,366 16	
" eastern pumping station		14 28	
" pumps and fountains		3 00	
" Jones' Falls conduit		40 80	
" fire-plugs		2 00	
" Hampden reservoir		62 60	
" Lake Clifton		39 55	
Amount carried forward		$766,688 16	

STATEMENT A—Continued.

	Dr.	Cr.
Amount brought forward..	$766,688 16	
To western pumping station.	35 20	
" Druid Lake	5 20	
" Guilford reservoir	33 60	
" appropriations by Mayor and City Council.	7,100 00	
To water tax	52,702 66	
By deposit with City Register, January		$128,512 22
By deposit with City Register, February		234,667 06
By deposit with City Register, March		50,939 10
By deposit with City Register, April		70,247 50
By deposit with City Register, May		57,051 96
By deposit with City Register, June		18,686 36
By deposit with City Register, July		57,433 70
By deposit with City Register, August		27,302 95
By deposit with City Register, September		23,744 68
Amounts carried forward...	$826,564 82	$668,685 53

STATEMENT A—Concluded.

Amounts brought forward.	$826,564 82	$668,685 53
By deposit with City Register, October		64,041 67
By deposit with City Register, November		12,826 98
By deposit with City Register, December		26,179 94
By water tax		52,702 66
By balance on hand, December 30, 1893		2,228 04
	$826,564 82	$826,564 82

STATEMENT B.

Water Registrar's Disbursement Account for the Year 1893.

	Dr.	Cr.
To Water Board warrants drawn by the Board on the City Comptroller during the year	$898,083 06	
By Guilford reservoir		$30,866 93
" distributing mains		161,657 49
" fire-plugs		5,247 60
" pumps and fountains		2,140 09
" tools and fixtures		1,041 72
" returned money		1,593 66
" plumbing department		45,725 89
" repairs		34,138 07
" Lake Montebello		3,924 35
" current expenses		10,311 42
" western pumping station		15,958 50
" Lake Roland		2,888 83
" Engineer's department		9,214 92
" Registrar's department		25,874 41
" temporary supply		600 00
" Hampden reservoir		1,751 18
" Loch Raven		5,989 80
" Lake Clifton		2,407 17
Amounts carried forward	$898,083 06	$361,332 03

STATEMENT B—Concluded.

	Dr.	Cr.
Amounts brought forward.	$898,083 06	$361,332 03
By Druid Lake		1,885 33
" Mount Royal reservoir..		829 98
" high service reservoir...		426 79
" water courses		1,134 96
" Jones' Falls conduit....		164 25
" eastern pumping station.		17,517 36
" stationery and printing.		2,162 36
" interest on water bonds.		512,630 00
	$898,083 06	$898,083 06

STATEMENT C.

DR. *Trial Balance, General*

Folio.		
6	Construction of new works	$3,884,123 65
8	Real estate and water rights	772,010 57
10	Gunpowder real estate and water rights	232,288 45
12	Gunpowder permanent supply	4,842,218 10
102	Water Registrar's cash account	2,228 04
152	Lake Clifton	2,367 62
158	Guilford Reservoir	162,671 24
171	Distributing mains	2,609,888 47
189	Tools and fixtures	8,381 85
196	Water meters	6,000 00
197	Lake Montebello	3,820 56
211	Repairs	34,138 07
220	Lake Roland	1,522 67
223	Druid Lake	1,880 13
227	High Service reservoir	426 79
231	Hampden reservoir	1,688 58
235	Mount Royal reservoir	829 98
238	Printing and stationery	2,162 36
247	Current expenses	10,311 42
256	Engineer's department	9,214 92
260	Registrar's department	25,874 41
264	Returned money	1,593 66
271	Pumps and fountains	1,312 09
279	Loch Raven	5,658 75
289	Western pumping station	15,923 30
299	Fire plugs	1,970 60
307	Eastern pumping station	17,503 08
323	Temporary supply	600 00
331	Water courses	1,134 96
335	Jones' falls conduit	123 45
417	Discount on 1893 water rents	35,016 46
		$12,694,884 23

STATEMENT C.

Ledger, December 31, 1893. Cr.

Folio.		
1	City 6 per cent. water stock.....	$ 263,000 00
1	" 5 " "	8,737,000 00
1	" 4 " "	1,500,000 00
2	Profit and loss.....	1,329,138 68
47	Mayor and City Council.....	117,985 94
374	Plumbing department.....	11,356 92
458	Interest on back water rents	2,994 91
500	Meter rents.....	178,292 67
566	1890 Water rents.....	2,675 49
591	1891 "	7,412 09
610	1892 "	130,431 12
631	1093 "	414,596 41
		$12,694,884 23

STATEMENT D.

Dr. *Balance Sheet, General*

Folio.		
6	Construction of new works	$ 3,884,123 65
8	Real estate and water rights	772,010 57
10	Gunpowder, real estate and water rights	232,288 45
12	Gunpowder permanent supply	4,842,218 10
102	Water Registrar's cash	2,228 04
158	Guilford reservoir	162,671 24
171	Distributing mains	2,609,888 47
189	Tools and fixtures	7,340 13
196	Water meters	6,000 00
		$12,518,768 65

STATEMENT D.

Ledger, December 31, 1893. CR.

Folio.		
1	City six per cent. water bonds.....	$ 263,000 00
1	City five per cent. water bonds.....	8,737,000 00
1	City four per cent. water bonds.....	1,500,000 00
2	Profit and loss.....	1,900,782 71
47	Mayor and City Council.....	117,985 94
		$12,518,768 65

STATEMENT E.

Receipts of the Water Department for the Year 1893.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
Water rents, 1893	$61,677 85	$237,375 58	$39,044 05	$11,893 96	$10,035 18	$5,847 49	$4,415 32	$6,540 84	$7,861 62	$ 7,528 81	$5,941 23	$16,434 48	$414,596 41
Water rents, 1892	22,894 85	13,469 52	12,607 68	16,704 48	38,526 32	6,629 57	3,971 95	8,407 16	4,694 42	1,315 54	870 13	339 50	130,431 12
Water rents, 1891	508 33	320 84	425 76	699 66	1,439 13	396 66	742 00	1,653 06	622 15	288 00	205 00	111 50	7,412 09
Water rents, 1890	222 25	80 00	94 00	223 32	400 25	232 50	297 50	442 00	214 50	342 00	75 17	52 00	2,675 49
Meter rents	45,869 50	1,449 86	118 94	37,688 75	352 30	328 70	39,414 46	102 30	158 19	49,133 07	2,655 44	1,021 16	178,292 67
Interest on back water rents	30 10	93 43	160 45	331 44	905 70	224 72	226 26	512 36	273 09	117 78	59 11	30 47	2,994 91
Plumbing bills	3,618 88	3,946 28	1,726 99	3,259 63	5,557 26	4,869 14	8,183 26	2,362 65	9,648 48	5,174 02	2,634 45	7,403 23	58,384 27
Distributing mains	40 09	1,652 45	21 50	3 50	132 60	160 98	277 62	176 38	24 18	91 20	70 72	103 42	2,754 64
Lake Montebello	71 00	7 79	25 00										103 79
Loch Raven		15 00	5 20	15 25	19 00	30 60	17 00	14 00	74 23	13 00		127 77	331 05
Lake Roland			301 23		83 35	137 55		95 79	84 58	99 17	64 87	499 62	1,366 16
Eastern pumping station			4 45	2 90								6 93	14 28
Pumps and fountains					3 00								3 00
Jones' falls conduit						6 00						34 80	40 80
Fire-plugs								2 00					2 00
Hampden reservoir								62 60					62 60
Lake Clifton								39 55					39 55
Western pumping station								7 60	27 60				35 20
Druid Lake								5 20					5 20
Guilford reservoir											33 60		33 60
	$134,962 85	$258,410 75	$54,535 25	$70,822 89	$57,454 09	$18,863 91	$57,545 37	$20,423 49	$23,683 04	$64,102 59	$12,609 72	$26,164 88	$799,578 83

Appropriations made by Mayor and City Council :	
For forty-three fire-plugs to be erected in various locations	3,225 00
For eleven drinking fountains to be erected in various locations	825 00
For removing plug from Broadway and Lanvale street, to south side of Lanvale street	50 00
For laying water mains on William and Johnson streets, Fort avenue and other streets in the vicinity of Riverside Park	3,000 00
Received water tax	52,702 66
Total gross receipts for the year	$859,381 49

STATEMENT F.

Disbursements of the Water Department for the Year 1893.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Totals.
Guilford reservoir	$ 1,090 64	$ 665 76	$ 771 95	$ 2,165 75	$ 7,472 17	$ 3,374 08	$ 3,471 41	$10,083 56	$ 316 58	$ 190 70	$ 886 29	$ 378 04	$ 30,866 93
Distributing mains	10,436 57	5,827 41	12,628 09	19,544 00	15,827 27	13,453 81	18,584 26	25,068 70	15,254 26	7,809 93	8,693 26	8,529 93	161,657 49
Fire-plugs	347 02	424 83	934 22	755 15	329 54	1,026 88	422 20	106 05	198 35	212 20	204 44	286 72	5,247 60
Pumps and fountains	124 42	179 50	120 84	328 36	526 80	127 48	141 28	101 00	157 04	140 20	99 85	93 32	2,140 09
Tools and fixtures	89 51	49 75	39 87	46 13	77 22	180 77	117 92	25 87	64 16	189 36	71 50	89 66	1,041 72
Returned money	21 16	138 65	106 39	345 45	166 49	156 99	118 14	85 10	185 43	95 32	146 46	28 08	1,593 66
Plumbing Department	2,917 56	729 26	4,283 23	3,658 41	4,813 83	8,022 39	6,230 69	5,106 99	3,281 57	2,006 83	2,515 79	2,159 34	45,725 89
Repairs	4,630 37	7,363 56	4,285 54	1,854 08	2,192 46	2,288 41	1,705 82	1,855 28	1,891 81	1,445 57	2,112 43	2,512 74	34,138 07
Lake Montebello	244 87	174 54	197 95	217 89	191 83	234 43	259 85	283 98	294 09	363 47	637 39	824 06	3,924 35
Current expenses	927 66	890 84	589 45	565 80	1,254 86	858 88	556 28	916 85	387 54	358 09	2,564 52	440 65	10,311 42
Western pumping station	1,405 58	833 09	609 57	1,133 69	575 91	2,838 14	2,788 94	618 22	599 55	665 67	885 15	3,004 99	15,958 50
Lake Roland	196 48	158 86	152 65	185 16	217 44	328 15	281 39	320 32	314 68	285 71	225 72	222 27	2,888 83
Engineer's Department	741 66	766 66	766 66	766 66	766 66	766 66	766 66	766 66	766 66	766 66	766 66	806 66	9,214 92
Registrar's Department	2,074 96	2,074 95	2,149 95	2,174 95	2,174 95	2,174 95	2,174 95	2,174 95	2,174 95	2,174 95	2,174 95	2,174 95	25,874 41
Temporary supply	50 00	50 00	50 00	50 00	50 00	50 00	50 00	50 00	50 00	50 00	50 00	50 00	600 00
Hampden reservoir	37 03	66 76	25 51	23 56	455 70	420 94	204 83	93 27	113 72	217 84	30 01	62 01	1,751 18
Loch Raven	809 29	130 46	182 78	641 70	700 46	768 71	712 94	646 82	643 61	211 42	367 62	173 99	5,989 80
Lake Clifton	167 30	163 28	123 96	168 26	217 78	273 06	257 09	249 67	212 92	170 12	163 28	240 45	2,407 17
Druid Lake	196 90	46 70	109 56	83 57	131 50	159 03	225 82	369 86	241 54	118 22	127 28	75 35	1,885 33
Mount Royal reservoir	45 41	52 96	45 41	61 51	59 72	72 53	73 31	75 41	59 67	65 41	140 86	77 78	829 98
High service reservoir	34 38	20 00	20 00	34 00	20 00	20 00	36 55	48 64	23 28	50 00	106 44	13 50	426 79
Water courses	94 58	94 58	94 58	94 58	94 58	94 58	94 58	94 58	94 58	94 58	94 58	94 58	1,134 96
Jones' falls conduit	10 00	10 00	10 00	10 00	10 00	35 50	10 00	28 75	10 00	10 00	10 00	10 00	164 25
Eastern pumping station	111 93	1,827 68	2,026 04	737 10	817 89	1,360 56	2,434 32	1,850 14	1,290 77	1,010 08	1,936 01	2,114 84	17,517 36
Stationery and printing		330 07	82 55	561 21	117 31		175 12	80 62		47 84	463 65	303 99	2,162 36
	$26,805 28	$23,070 15	$30,496 75	$36,206 97	$39,262 37	$39,086 93	$41,894 35	$51,101 29	$28,626 76	$18,750 17	$25,474 14	$24,767 90	$385,453 06
Twelve months' interest on $10,500,000.00 water bonds													512,630 00
Total disbursements for the year													$898,083 06

STATEMENT G.

New Supplies for the Year 1893.

412	houses	@	$ 3 00	$1,236 00	
532	"	@	5 00	2,660 00	
722	"	@	6 00	4,332 00	
457	"	@	7 00	3,199 00	
78	"	@	7 50	585 00	
154	"	@	8 00	1,232 00	
94	"	@	9 00	846 00	
72	"	@	10 00	720 00	
17	"	@	11 00	187 00	
48	"	@	12 00	576 00	
60	"	@	13 00	780 00	
					$16,353 00
2646					
3	warehouses	@	6 00	18 00	
6	"	@	8 00	48 00	
13	"	@	10 00	130 00	196 00
2668					$16,549 00
84	baths	@	$2 00	$168 00	
211	hose	@	3 00	633 00	
27	horses	@	1 50	40 50	
22	carriages	@	1 50	33 00	
1	cow	@	1 00	1 00	
20	offices	@	4 00	80 00	
Amounts carried forward				$955 50	$16,549 00

STATEMENT G—Continued.

Amounts brought forward.....			$955 50	$16,549 00
9 churches.....	@	5 00..	45 00	
3 motors..	@	25 00..	75 00	
1 "	@	40 00..	40 00	
1 "	@	30 00..	30 00	
11 bars.....	@	5 00..	55 00	
2 "	@	3 00..	6 00	
2 drugs.....	@	3 00..	6 00	
1 "	@	5 00..	5 00	
1 bottling establishment	@	10 00..	10 00	
1 pickling	@	5 00..	5 00	
3 gas engines.....	@	10 00..	30 00	
1 special rent.....	@	50 00..	50 00	
1 "	@	20 00..	20 00	
1 "	@	25 00..	25 00	
1 oyster establishment.....	@	15 00..	15 00	
1 oyster establishment.....	@	25 00..	25 00	
1 oyster establishment.....	@	5 00..	5 00	
1 brewery	@	25 00..	25 00	
1 bakery.....	@	3 00..	3 00	
Amounts carried forward			$1,430 50	$16,549 00

STATEMENT G—Concluded.

Amounts brought forward.....			$1,430 50	$16,549 00
1 bakery.....	@	5 00..	5 00	
1 trough.....	@	20 00..	20 00	
20 boarders.....	@	50..	10 00	
		PER H. P.		
2 8-h. p. boilers..	@	$3 00..	48 00	
2 10 " " ..	@	3 00..	60 00	
1 35 " " ..	@	3 00..	105 00	
1 fountain.....	@	50 00..	50 00	
				1,728 50
Producing a yearly revenue of.....				$18,277 50

STATEMENT H.

Abatements Condensed for the Year 1893.

	1890.	1891.	1892.	1893.
Vacancies.....	$121 76	$795 50	$2,711 92	$1,848 28
Duplicates and torn down...	443 75	583 50	1,370 34	1,931 87
Hose.....	3 00	27 00	105 75	275 75
Horses.....	.....	6 00	39 50	88 50
Carriages.....	.....	.....	3 00	23 00
Bars.....	5 58	18 33	117 27	183 99
Reductions....	34 50	73 50	101 56	267 35
Specials.....	30 00	68 00	230 75	447 58
	$638 59	$1,571 83	$4,680 09	$5,066 32

Total amount of abatements for the year..$11,956 83

STATEMENT I.

Comparative Statements of Receipts for the Years 1891, 1892 *and* 1893.

1891.		1892.		1893.	
1891 Water rents	$392,634 04	1892 Water rents	$403,295 70	1893 Water rents	$414,596 41
1890 " "	129,021 69	1891 " "	125,215 84	1892 " "	130,431 12
1889 " "	9,097 50	1890 " "	5,413 66	1891 " "	7,412 09
1888 " "	3,556 24	1889 " "	2,695 25	1890 " "	2,675 49
Meter rents	149,327 57	Meter rents	159,459 86	Meter rents	178,292 67
	$683,637 04		$696,080 31		$733,407 78
Less discount on 1891 water rents	32,343 66	Less discount on 1892 water rents	33,297 31	Less discount on 1893 water rents	35,016 46
	$651,293 38		$662,783 00		$698,391 32
Interest on back water rents	3,024 23	Interest on back water rents	2,471 14	Interest on back water rents	2,994 91
Plumbing bills	51,920 85	Plumbing bills	109,097 46	Plumbing bills	58,384 27
Lake Roland	1,568 93	Distributing mains	1,625 98	Distributing mains	2,754 64
Loch Raven	442 52	Lake Roland	1,569 15	Lake Montebello	103 79
Distributing mains	498 97	Profit and Loss	22 00	Loch Raven	331 05
Lake Montebello	287 67	Loch Raven	610 36	Lake Roland	1,366 16
Tools and fixtures	145 00	Lake Montebello	124 59	Eastern pumping station	14 28
Lake Clifton	272 08	Jones' falls conduit	7 00	Pumps and fountains	3 00
Druid Lake	12 60	Pumps and fountains	26 00	Jones' falls conduit	40 80
Appropriations by Mayor and City Council	8,750 00	High service pump house	7 00	Fire-plugs	2 00
		Lake Clifton	196 23	Hampden reservoir	62 60
		High service reservoir	7 00	Lake Clifton	39 55
		Druid Lake	29 60	Western pumping station	35 20
		Fire-plugs	150 00	Druid Lake	5 20
		Appropriations by Mayor and City Council	3,145 00	Guilford reservoir	33 60
				Appropriations by Mayor and City Council	7,100 00
	$718,216 23		$781,871 51		$771,662 37
Water tax	54,331 15	Water tax	54,608 85	Water tax	52,702 66
	$772,547 38				
Guilford reservoir	37 00				
Force main	73 22				
Water stock, 1926	200,000 00				
	$972,657 60		$836,480 36		$824,365 03

STATEMENT K.

Balances Remaining on the Ledgers of the Water Department December 31, 1893.

1893 water rents	$136,452 28
1892 " "	7,022 79
1891 " "	2,962 50
Plumbing bills	13,342 11
Meter rents	3,031 87
	$162,811 55

STATEMENT L.

Revenues from 1894 *Ledgers, January* 1, 1894.

23,794	houses	@	$3 00	$71,382 00	
12,077	"	@	5 00	60,385 00	
15,029	"	@	6 00	90,174 00	
9,467	"	@	7 00	66,269 00	
6,997	"	@	8 00	55,976 00	
3,883	"	@	9 00	34,947 00	
3,489	"	@	10 00	34,890 00	
1,499	"	@	11 00	16,489 00	
4,091	"	@	12 00	49,092 00	
3,121	"	@	13 00	40,573 00	
					$520,177 00
83,447					
267	warehouses	@	$6 00	$1,602 00	
534	"	@	8 00	4,272 00	
1,124	"	@	10 00	11,240 00	17,114 00
85,372					
6,356	hose	@	$3 00	19,068 00	
2,570	horses	@	1 50	3,855 00	
1,374	carriages	@	1 50	2,061 00	
418	bars	@	3 00	1,254 00	
1,382	"	@	5 00	6,910 00	
1,974	h.p.boilers.	@	3 00 per h.p.	5,922 00	
238	offices	@	4 00	952 00	
238	churches	@	5 00	1,190 00	41,212 00
					$578,503 00
Specials, embracing rents, motors, etc.					28,943 09
Meters and indicators (estimated)					200,000 00
					$807,446 09

Acting Chief Engineer's Report.

REPORT.

OFFICE OF THE ACTING CHIEF ENGINEER—CITY HALL.

BALTIMORE, January 1, 1894.

To the Honorable the President and
Members of the Water Board:

GENTLEMEN:

Owing to the death of Mr. Robert K. Martin, your Chief Engineer, on the 24th day of November last, I beg leave to submit this report of the Engineer's Department for the year ending December 31, 1893:

There were fitted up by the mechanical department

62	2-inch	stop-cocks,
166	3 "	"
316	4 "	"
90	6 "	"
39	10 "	"
2	20 "	"
2	30 "	"
51	4-inch	fire-plugs,
50	5 "	"

And there were repaired:

1 3-inch stop-cock,
4 2 " "
17 4 " "
1 10 " "
8 4-inch fire-plugs,
1 5 " "
12 round fountains.

There were laid in the following localities additional mains:

A twelve-inch line, by partial appropriation of $3,000, on William street, from Randall to Clement, to Covington, to Fort avenue, length 2,412 feet; cost, $4,669.63.

A twelve-inch line on Oxford avenue, between York road and Frisby lane, length 456⅓ feet; a six-inch on Frisby lane, between Oxford and Brady avenues, length 74⅔ feet; a four-inch on York road, between Oxford and Cottage avenues, length 1,011 feet, total cost, $1,280.09.

A ten-inch line on Fremont street, between Warner and Paca streets, length 1,467$\frac{8}{12}$ feet; cost, $2,167.18. This line had to be abandoned in 1891 on account of construction of Fremont-street sewer, and was thus relaid at expense of City Commissioner.

Ten-inch Lines—Baltimore street, between Fremont and Poppleton, length 888 feet, cost, $1,041.10; Pratt, between Carey and Carrollton avenue, length 61$\frac{8}{12}$ feet, cost, $64.83.

Six-inch Lines—Hall alley and Durst alley, both between Clement and Randall, length 1,776 feet, cost, $883.13; Huntingdon avenue, between Maryland avenue and Calvert, length 814 feet, cost, $678.64; Wilkens avenue, between Lombard and Frederick road, length 765 feet, cost, $555.70; Erdman lane, west of Belair avenue, length 1,172 feet, cost, $784.75.

A six-inch line on Linden avenue, between North avenue and Ducatel street, length 666 feet, a four on Ducatel, east from Linden avenue, length 530 feet, total cost, $627.99.

A six-inch and a four-inch line on Quaker lane, between Walpert and St. Ann's avenues, length 234⅓ feet, six-inch, 1,270⅓ feet of four-inch; total cost, $765.64.

There were laid the following sizes and lengths of pipe lines to give the Baltimore City Passenger Railway Company the unobstructed use of the centre of the streets, and paid for by them:

Baltimore street, between Lloyd and Exeter streets, 72 feet of 8-inch pipe, and 110 feet of 6-inch pipe laid on north side.

Baltimore street, between Lloyd street and Central avenue, 649 feet of 4-inch pipe on south side of street.

Calvert street, between Baltimore and Fayette streets, 228 feet of 4-inch pipe on east side of street.

Lombard street, between Eutaw and Paca streets, 180 feet of 6-inch pipe on north side of street.

Madison avenue, north of North avenue, 36 feet of 6-inch pipe on east side of street.

Belair avenue, between Patterson Park avenue and North avenue, 48 feet of 10-inch pipe on east side of street.

Cider alley, between Eutaw and Paca streets, 375 feet of 10-inch pipe.

Eutaw street, between German and Lombard streets, 60 feet of 10-inch pipe on west side of street.

There were laid the following sizes and length of pipe lines to replace such original lines as were cut off, broken or changed by the construction of the Belt Line tunnel along Howard street:

Howard street, between Richmond and Madison streets, connected up 20-inch main with 12 feet of 20-inch main.

Howard and Madison street crossing connected up with 24 feet of 6-inch pipe from east to west sides of streets.

Howard street, between Franklin and Monument streets, 372 feet of 10-inch pipe relaid west side, 299 feet of 4-inch pipe relaid on east side of street.

Howard street, between Franklin and Centre streets, 312 feet of 4-inch pipe relaid on east side of street.

Howard street, between Lexington and Clay streets,

240 feet of 6-inch and 48 feet of 3-inch pipe relaid on east side of street.

Howard and Clay streets, Howard and Pratt streets, Howard and Camden streets, all crossing from east to west side of streets, 86 feet of 10-inch, 126 feet of 6-inch, 15 feet of 4-inch pipe.

Howard street, between Lombard and German streets, 440 feet of 10-inch pipe relaid on west side, and 66 feet of 6-inch pipe on east side of street.

Lombard street from Howard to Sharp streets, thence along Sharp to Camden street, 1,234 feet of 10-inch pipe.

Brevard street, between Hoffman and Preston streets, connected up again with 96 feet of 6-inch pipe.

There were laid 30,614 $^{5}/_{7}$ feet of 1½-inch pipe for plumbing supplies and 77,142⅓ feet 10 inches of pipe mains for distribution, additional supplies and epairs, as follows :

137	feet	..	inches	of	1½	-inch pipe.
1,508	"	6	"	"	2	"
5,388	"	7	"	"	3	"
44,406	"	6	"	"	4	"
16,200	"	..	"	"	6	"
7	"	6	"	"	8	"
5,599	"	..	"	"	10	"
2,868	"	10	"	"	12	"
17	"	..	"	"	20	"
1,009	"	5	"	"	40	"
77,142	feet	4	inches.			

The new building supplies in 1893 were 2,668, from which an annual revenue of $18,277.50 will be derived.

There were 1,093 leaks on main pipes of sizes from 1½ to 40 inches, and 157 stop-cocks on main lines of sizes from 2 inches to 16 inches, inspected and repaired.

There were 17 pumps removed, 5 repaired and 1 new pump replaced for old one at the northeast corner Ann and Lancaster streets.

There were 226 fire-plugs repaired.

There were 77 new fire-plugs erected, of which 59 were located upon new and 18 upon old sites.

ON NEW SITES.

Foot of Gutman avenue.
Southwest corner Lombard and Sharp streets, No. 2.
Southwest corner Sharp and Camden streets.
Northeast corner Calvert and Baltimore streets.
Southeast corner Brunswick and Lehman streets.
Northwest corner Lombard and Howard streets.
Northwest corner Oxford avenue and Frisby street.
Southwest corner York road and Wilson street.
Northeast corner Francis and Retreat streets.
East side Francis, between Retreat and Whitelock streets.
Southeast corner Monument and Cannon streets.
Northwest corner Edgar Place and Fayette street.
Northwest corner Baltimore and Cannon streets.

Northwest corner Lexington and Gay streets.
Southeast corner Lexington and Holliday streets.
Front of No. 18 Engine House, Twenty-first street.
Northwest corner Federal and Washington streets.
Southwest corner Fayette street and Broadway.
Eutaw street, between Cider alley and Lombard street.
Biddle street, between Elder alley and Druid Hill ave.
Southwest corner William and Heath streets.
Southwest corner Sharp and Stockholm streets.
Northeast corner Patuxent and Boston streets.
Northeast corner Potomac and Boston streets.
Southeast corner Hare and Elliott streets.
Northwest corner Fremont and Winchester streets.
Northwest corner Carey and Winchester streets.
Northwest corner Carrollton and Riggs avenues.
Southwest corner Carrollton and Winchester streets.
Southeast corner Gold and Calhoun streets.
Northwest corner Gold and Calhoun streets.
Southeast corner Lanvale and Carey streets.
Near northwest corner Lanvale and Calhoun streets.
Fremont street and Arlington avenue.
Northwest corner Patterson avenue and Stockton street.
Northwest corner Mount street and Patterson avenue.
Northwest corner Mount street and Riggs avenue.
Northwest corner Mount and Mosher streets.
Northwest corner Fulton and Harlem avenues.
Northeast corner Mosher and Calhoun streets.
Northeast corner Pennsylvania avenue and McMechen street.

Southwest corner Lanvale street and Arlington avenue.
Southwest corner Argyle and Lafayette avenues.
Southwest corner Pennsylvania avenue and Oxford street.
Southeast corner Hoffman street and Myrtle avenue.
Northwest corner Druid Hill avenue and Oxford street.
Northeast corner Druid Hill avenue and Hoffman street.
Northwest corner Druid Hill avenue and Laurens street.
Northwest corner McCulloh and Roberts streets.
Southeast corner Madison avenue and McMechen street.
Southeast corner Bolton and Lennox.
Northwest corner Baker and Division streets.
Northeast corner Druid Hill avenue and Bloom street.
Wilkens avenue, between Lombard and Hollins streets.
Harrison street, at No. 1 Truck House.
Southeast corner Holiday and Saratoga street.
Northwest corner William and Randall.
Erdman lane, between Belair and Harford roads.
Belair road, east of Erdman avenue.

ON OLD SITES.

Baltimore and Durham streets.
Saratoga and Carlton streets.
Stiles and Little Gough streets.
Orleans and Washington streets.
Eutaw and Saratoga streets.
Franklin and Pearl streets.
East side Central avenue, near Jefferson street.

Biddle street, between Pennsylvania avenue and Druid Hill avenue.
Baltimore and Payson streets.
East side Gilmor street, north of Lafayette avenue.
Pearl and Sarah Ann streets.
Franklin and Brune streets.
Conway and Sharp streets.
Pratt and Eutaw streets.
Second street and Postoffice avenue.
Columbia avenue and Scott street.
Addison alley and McHenry street.
Pine and Pin alley.
Baltimore and Liberty streets.
Barney and Light streets.
Elliott and Patuxent streets.
Henrietta and Sharp streets.
206 South Chester street.
Warner street, near Cross street.
Canton avenue and Cambridge street.
No. 2 Engine House, Barre street.
German street, west of Green street.
Forrest Place and Eager street.
Grant and Water streets.
Lexington and Front streets.
Penn street, south of German street.
Baltimore and Green streets.
Lee and Sharp streets.
Lexington and Forrest streets.
West and Eutaw streets.

Pine street and Chestnut alley.
Bond and Thames streets.
Charles and Lexington streets.
Eastern avenue and Exeter street.
Wells and Philpot streets.
Fort avenue and Light street.
Lexington street, west of Charles street.
Gough street and Broadway.
Stiles street, between High and Albemarle streets.
Pratt and Charles streets.

Total number of fire-plugs in the city is 1,474.

There were 11 new fountains erected, viz:

Northeast corner Thames and Bond streets.
Northeast corner Wilkens avenue and Bentalou street.
Northwest corner Covington and Randall streets.
Northwest corner Fayette and Amity streets.
Northeast corner Caroline and McElderry streets.
Southwest corner Pratt and Paca streets.
Northwest corner Broadway and Lancaster street.
York road, between Townsend and Lanvale streets.
Southeast corner Caroline and Bank streets.
Southeast corner Pennsylvania and Fulton avenues.
Northeast corner Tenth street and North avenue.

There are in the city 155 public fountains for the use of man and beast, and 21 for mankind only.

The registered consumption of water by meters and indicators was as follows:

	Gallons.
Elevators by indicators	933,100,000
Elevators by meters	10,000,000
Railroads by meters	567,612,000
Miscellaneous by meters	945,000,000
Steamboat companies by meters	55,500,000
Livery stables by meters	34,245,000
Pork packers and butchers by meters	114,444,000
Beer breweries by meters	406,779,000
Whiskey distilleries by meters	68,217,000
Brickyards by meters	10,400,000
Coal oil refineries by meters	7,140,000
Drove yards by meters	17,100,000
Oyster and fruit packers by meters	79,900,000
Hotels by meters	61,165,000
Planing mills by meters	59,280,000
	3,369,882,000

Being an increase of 81,132,000 gallons over the year 1892.

The number and sizes of meters and the number of indicators placed in operation are as follows:

Meters	15	¾ inch.
"	13	1 "
"	6	1½ "
"	8	2 "
"	14	3 "
	56	
Indicators	1	
Total	57	

The numbers and sizes of meters and number of indicators in use are:

Meters	324	$\frac{3}{4}$ inch.
"	220	1 "
"	117	$1\frac{1}{2}$ "
"	157	2 "
"	246	3 "
"	6	4 "
	1,070	
Indicators	417	
Total	1,487	

The western high-service pumps in Druid Hill Park were worked 6,512 hours, there were 895,470,510 gallons of water pumped into the reservoir, and the consumption of coal was $1{,}303\frac{980}{2240}$ tons.

The amount expended in pumping water was $15,103.40, or the rate of $1\frac{351}{1000}$ cents per 1,000 gallons.

The eastern high-service pump, Ann and Oliver streets, was worked 6,777 hours, there were 1,401,896,549 gallons of water pumped, and the consumption of coal was $1{,}355\frac{1747}{2240}$ tons, and the average cost per 1,000 gallons was $0\frac{735}{1000}$ cents.

The flow of water was less than 1892 on the Jones' Falls supply.

Lake Roland was muddy 13 days, and the rainfall was 5½ inches less.

The greatest flow over the dam was 14 inches on the 4th day of May; the water was below the crest of the dam four months, and the extreme depth during the year was 13 feet, 7 feet lower than last year.

There was an average daily flow of water through the conduit from Lake Roland to Hampden Reservoir of 6,992,000,000 gallons of water, being a decrease of 721,000,000 gallons from 1892.

The Jones' Falls Conduit, Hampden Reservoir and the four lines of 30-inch mains from Hampden to Druid Lake have been no expense for their maintenance in keeping up the supply of water from Lake Roland.

In May the water in Druid Lake was two feet low, continued to fall until the 28th of August, when the water was down 103½ inches; it is now full again.

The daily consumption of water from Druid Lake, averaged 18,803,388 gallons, a decrease of 1,858,037 per day for 1892.

There were 895,470,510 gallons of water pumped from Druid Lake, into the western high-service reservoir, 408,232,052 gallons less than last year, and the pump at Ann and Oliver streets, pumped from the Gunpowder, 1,401,896,549 gallons, being a total of 2,297,367,059

gallons water pumped for both high-service supplies. A total increase of 543,914,285 gallons over 1892.

The total flow of the Gunpowder, was 25,374,000,000, gallons less than 1892. The amount of clear water was 18,380,000,000 more, and the amount of muddy water was 3,644,000,000 less.

The average daily consumption of water from the Gunpowder supply, during the year was 28,865,286 gallons, and the average daily consumption from both the Gunpowder and Jones' falls supply, was 47,745,840 gallons, 588,007 gallons daily in excess of 1892.

The water in Loch Raven was muddy 74 days during the year, 6 days less than in 1892, and the rainfall was 3.38 less. The seven mile tunnel from Loch Raven to Lake Montebello, continues in good working order, and has been no expense during the year.

Lake Montebello is full of good clear water, and has been so most of the year, rarely lowering more than a few feet when the water is muddy at Loch Raven. A heavy waste has been maintained from the bottom, and the average daily supply to the city from this lake, in excess of 1892, was 2,544,869 gallons of water.

The drain tunnel around Lake Montebello, and the tunnel connecting Lake Montebello and Clifton, have been in good working condition all the year.

Guilford reservoir was completed June 29, 1893, and

has been supplying Waverly and that neighborhood since with water.

The break on the 40-inch main near the gate house has been completed, and the city is being supplied directly from there through three perfect 40-inch pipes.

The daily inspection of the tributaries of the Gunpowder and Jones' falls supplies continues to be made without finding anything serious or detrimental to the healthy condition of the streams from which our supplies of water are obtained.

I here renew the recommendation made by the late Mr. R. K. Martin of the great necessity of another crossing of Jones' falls, there being but one large one at Lombard street, upon which the central, southwestern and southern sections of the city are dependent for their supply of water; and also that a parallel pipe line to the Lombard street 40-inch main should be laid from east to west through the business portion of the city, and extended southward.

Coming as I did unexpectedly to take charge of this work, my duties would have been much heavier but for the efficiency of the officers and employees in this department, who have assisted me in every way by the satisfactory manner in which they have performed their various duties.

Respectfully submitted,

WILLIAM L. KENLY,

Acting Chief Engineer.

INVENTORY, 1893.

Distributing main	$74,478 82
Plumbing department	11,535 95
Force main	10,074 00
Tools and fixtures	7,340 13
Plugs	4,182 90
Fountains	510 56
	$108,122 36

From.	Amount Turned Over to Water Registrar.							Amount of Bills Delivered to Water Registrar for Work Done, Etc.				
	Hay.	Straw.	Ice.	Sand.	Coal.	Old Material.	Rent.	Old Boilers.	Old Material.	Service Pipes.	Mains Laid in County.	Totals.
Lake Roland	$1,036 24		$232 87	$97 05								$1,366 16
Lake Montebello	103 79											103 79
Loch Raven	168 82	$32 38	17 60		$ 2 25		$110 00					331 05
Distributing main					148 80	$7 83			$565 61			722 24
Plumbing department										$58,951 95	$1,301 46	60,253 41
Western pumping station	7 60				27 60							35 20
Druid Lake	5 20											5 20
Hampden reservoir						62 60						62 60
Eastern pumping station					4 45	9 83						14 28
Jones' Falls conduit	34 80						6 00					40 80
Temporary supply								$1,500 00				1,500 00
Totals	$1,356 45	$32 38	$250 47	$97 05	$183 10	$80 26	$116 00	$1,500 00	$565 61	$58,951 95	$1,301 46	$64,434 73

TABULAR STATEMENT No. 1.

Size and Number of Feet of Pipe Stop Cocks and Branches Laid in the City.

	1½ Inch.	2 Inch.	3 Inch.	4 Inch.	4½ Inch.	6 Inch.	8 Inch.	10 Inch.	12 Inch.	16 Inch.	18 Inch.	20 Inch.	30 Inch.	36 Inch.	40 Inch.	Total of Pipe.
No. of feet of pipe laid previous to purchase by Water Company		13,203	95,411	31,876	72,462	60,704	10,040	14,330	12,209	26,168	4,627	8,588	14,203			363,821
Laid by Water Commissioners from July 1, 1855, to December, 1857		1,909	14,720	28,362		5,005	613	448				9,716				60,773
By Water Board, 1858		2,948	24,438	23,742		8,692	144									59,964
" " 1859		638	22,972	40,367		14,503		6,300	108							84,888
" " 1860			20,488	35,106		22,134		7,910				14,889	1,428			101,955
" " 1861		276	8,317	15,432		8,722		5,017				1,080	8,292			47,136
" " 1862		1,140	11,065	6,562		560				490		6,599	51			26,467
" " 1863		2,729	12,223	5,696		3,744		4,560		720	1,170	1,314				32,156
" " 1864	1,784	314	20,899	8,362		6,981		13,476	405	1,962	783	1,395				56,361
" " 1865	7,929	796	16,930	11,729		3,204										40,588
" " 1866	2,903	4,413	15,813	10,864		13,048										47,041
" " 1867	1,145	14,252	17,349	8,808		6,491½		9,372								57,417½
" " 1868	1,642	4,475½	20,466½	14,759½		2,012½										43,356
" " 1869	192	4,765	16,595	9,457½		4,037½										35,047
" " 1870		8,502	11,372	10,886		600										31,360
From January 1 to October 31, 1871		6,895	11,863	13,205		8,452										40,415
From October 31, 1871, to October 31, 1872	78	6,871½	13,660½	12,479		3,425										36,514
From October 31, 1872, to October 31, 1873		4,551	10,677½	8,032½		5,405		2,150		3,400						34,216
From October 31, 1873, to October 31, 1874	36	4,402	8,169	10,525		10,959	5,795	8,537⅛								48,423⅛
From October 31, 1874, to October 31, 1875		3,542	7,544½	8,837½		11,750		4,362½				11,160	8,959½			56,156
From October 31, 1875, to October 31, 1876		1,982½	7,053½	15,383		1,050		3,312½		5,175		202½	7,215½			41,274½
From October 31, 1876, to October 31, 1877		1,289	17,246½	15,571½		7,462½		75	137½							41,782
By Water Board, 1878	175	1,603	7,567	11,579½		3,000		4,800		837½		425	3,312½			33,299½
" " 1879		1,603	4,490	10,876		3,160		2,038½				2,975				25,142½
" " 1880		1,882	5,057½	7,777½		5,459½		1,398					1,050	36,640		59,264½
" " 1881		933	9,034⅜	12,290½		6,421¾	1,717	3,169¼								33,566¼
" " 1882		1,058	8,423⅜	14,788		4,522⅜		4,964½								33,756$\frac{10}{12}$
" " 1883		1,269⅜	12,259	18,270$\frac{10}{12}$		13,295⅜	4,624⅜	5,026				15,817$\frac{11}{12}$	2,960$\frac{5}{12}$			73,524$\frac{3}{12}$
" " 1884		947	15,990½	25,302		11,100	530⅓	6,665⅓								60,535
" " 1885	27	651½	16,464$\frac{6}{12}$	25,884$\frac{10}{12}$		9,520⅜	2,197⅓	4,655⅜								59,401$\frac{3}{12}$
" " 1886	140	351	20,815$\frac{5}{6}$	27,582$\frac{5}{6}$	210	6,624	187⅜	4,196⅜								60,108
" " 1887	189	1,083½	16,998$\frac{5}{6}$	29,426⅜		11,093⅛	4,703	19,751$\frac{5}{6}$	6,114			13,074$\frac{1}{12}$				102,433$\frac{1}{12}$
" " 1888	19	1,401	21,098	24,303⅛		11,153$\frac{5}{6}$	2,212	22,089	14,695			18,194⅜				115,165$\frac{3}{12}$
" " 1889	115	454	11,155$\frac{1}{6}$	30,360$\frac{5}{6}$		8,898⅛		8,726⅛	7,292⅓	12		10,342	6,564	17,554		101,474
" " 1890	35	1,025¾	11,850$\frac{1}{12}$	35,286$\frac{11}{12}$		12,911$\frac{10}{12}$	481⅓	11,051$\frac{1}{12}$	6,621¾				81	1,623	2,474	83,441$\frac{3}{12}$
" " 1891	152	1,341⅓	7,442¼	48,593$\frac{11}{12}$		22,999¾	197$\frac{5}{6}$	10,932⅜	14,224½	11		961	1,387	8,855		117,098¼
" " 1892	146	1,090⅝	6,604$\frac{5}{6}$	48,333$\frac{1}{12}$		39,911	461⅙	15,823$\frac{5}{12}$	8,807½			171⅓	163⅓			121,512$\frac{5}{12}$
" " 1893	137	1,508½	5,388$\frac{7}{12}$	44,406½		16,200	7½	5,599	2,868$\frac{5}{6}$			17			1,009$\frac{5}{12}$	77,142⅜
	16,844	108,096½	585,914	761,105⅜	72,672	395,214$\frac{1}{12}$	33,911$\frac{5}{6}$	210,637$\frac{7}{12}$	73,483$\frac{5}{12}$	38,775½	6,580	117,021½	55,667¼	28,032	40,123$\frac{5}{12}$	2,543,978¼

TABULAR STATEMENT No. 2.—MAIN STOPS.

	2 Inch.	3 Inch.	4 Inch.	6 Inch.	8 Inch.	10 Inch.	12 Inch.	16 Inch.	18 Inch.	20 Inch.	28 Inch.	30 Inch.	36 Inch.	40 Inch.	Total.
Stop Cocks by Water Company	12	61	94	55	9	8	8	9	4	8		2			270
Stop Cocks by Water Commissioners	9	8	8	2						2					29
By Water Board, 1858	17	23	14	3	1		1	16		1					76
" " 1859	15	30	54	16		7									122
" " 1860		18	55	36		9				4		1			123
" " 1861	7	7	24	8		3						5			54
" " 1862	21	19	31	19		1		1		4					96
" " 1863	8	20	28	2		2				1					61
" " 1864	12	18	15	4		5				1					55
" " 1865	24	13	6	2											45
" " 1866	22	24	20	4											70
" " 1867	46	22	5	5		3									81
" " 1868	7	24	19	3											53
" " 1869		7	18	3											28
" " 1870		4	7												11
January 1, to October 31, 1871	5	11	25	5											46
October 31, 1871, to October 31, 1872	10	20	23	3											56
" 1872, " " 1873	7	14	25	12		2		2							62
" 1873, " " 1874	4	14	52	9	6	6									91
" 1874, " " 1875	3	5	31	10		6		1		6		2			64
" 1875, " " 1876	1	25	66	52	2			1		1		2			150
" 1876, " " 1877	5	69	50	13		2									139
By Water Board, 1878	7	29	22	2		6		4		2		1			73
" " 1879	4	15	37	6		2									64
" " 1880	3	9	46	42		12				3	8	2			125
" " 1881	4	26	41	6	2	2									81

By Water Board, 1882	5	27	36	19	.....	5	.....	.....	.....	.....	.....	.....	.....	.....	92
" " 1883	4	50	91	67	5	10	.....	3	.....	4	.....	1	.....	.....	235
" " 1884	9	59	119	31	1	5	.....	.....	.....	.....	.....	.....	.....	.....	224
" " 1885	6	38	85	23	6	6	.....	.....	.....	.....	.....	.....	.....	.....	164
" " 1886	6	68	103	21	2	12	.....	.....	.....	.....	.....	.....	.....	.....	212
" " 1887	42	94	201	97	8	27	6	.....	.....	5	.....	.....	.....	.....	480
" " 1888	41	103	354	132	3	34	12	.....	.....	6	.....	.....	.....	.....	705
" " 1889	26	103	195	58	4	31	33	2	.....	15	.....	2	2	.....	471
" " 1890	45	147	290	86	3	28	14	.....	.....	1	.....	5	.....	1	620
" " 1891	33	134	337	88	2	32	20	1	.....	1	.....	2	4	.....	654
" " 1892	27	185	379	173	1	48	8	.....	.....	.....	.....	.....	.....	.....	821
" " 1893	49	119	326	46	.....	8	2	.....	.....	3	.....	5	.....	3	561
	546	1682	3332	1163	55	322	104	40	4	68	8	30	6	4	7364

TABULAR STATEMENT No. 3.—Main Branches.

	1½ Inch.	2 Inch.	3 Inch.	4 Inch.	4½ Inch.	6 Inch.	8 Inch.	10 Inch.	12 Inch.	16 Inch.	18 Inch.	20 Inch.	30 Inch.	36 Inch.	40 Inch.	Total.
By Water Board, 1858		3	78	98		33	2			1						215
" " 1859			53	134		75		32	2							296
" " 1860			68	108		149		29				52	2			408
" " 1861			26	50		33		19				6	34			168
" " 1862		5	25	30		4		1				16				81
" " 1863		3	29	19		9		7		2	1	5				75
" " 1864	3	3	40	21		9	1	47		5	4	4				137
" " 1865	20		47	20		15										102
" " 1866	3		30	24		16										73
" " 1867	1	29	46	26		7		21								130
" " 1868	1	6	38	43		12										100
" " 1869		5	54	32		6		2								99
" " 1870		9	27	39		1										76
Jan. 1, to Oct. 31, 1871		6	22	29		32										89
Oct. 31, 1871, to Oct. 31, 1872		3	35	39		10										87
" 1872 " 1873		3	26	23		14		7		5						78
" 1873 " 1874		4	17	53		16	22	30		1						143
" 1874 " 1875		5	14	26		5		13		1		29	8			101
" 1875 " 1876		4	21	90		12		14		21			9			171
" 1876 " 1877		2	45	45		23	1	3								119
By Water Board, 1878		4	20	36		8				9		3	4			84
" " 1879		2	14	41		6		5								68
" " 1880			9	35		17		11				5			44	121
" " 1881		3	20	54		11	5	7								100
" " 1882		1	24	74		45		21				2				167
" " 1883		3	30	104		86	13	15		2		54	10			317

By Water Board,	1884	.....	3	40	123	.....	53	1	14	.....	.....	.....	.....	.....	.....	.....	234
" "	1885	.....	3	44	98	.....	58	7	17	.....	.....	.....	.....	1	.....	.....	228
" "	1886	.....	1	52	133	3	54	3	46	.....	.....	.....	.....	.....	.....	.....	292
" "	1887	2	5	64	177	3	76	7	74	20	.....	.....	57	1	.....	.....	486
" "	1888	2	3	124	253	4	167	14	73	58	.....	.....	75	2	.....	.....	775
" "	1889	1	1	54	177	4	46	3	16	11	1	.....	53	5	14	.....	386
" "	1890	2	2	75	156	8	76	6	74	31	.....	.....	1	2	2	2	437
" "	1891	2	7	51	237	3	170	4	59	64	.....	.....	2	2	27	.....	628
" "	1892	.....	3	41	238	2	147	5	124	29	.....	.....	.....	.....	.....	.....	589
" "	1893	.....	2	38	226	2	90	1	31	15	.....	.....	.....	4	.....	5	414
		37	133	1441	3111	29	1591	95	812	230	48	5	364	84	43	51	8074

Location, Size, Number of Feet, and Cost of Distributing Main, Laid from January 1, 1893, to December 31, 1893.

Street.	Between.	Size.	Length.	Cost.
Rear S. S. White	Monroe and Payson	4	592	$ 383 91
Hoffman	Ann and Regester	4	222	121 31
Rear S. S. Edmondson ave.	Monroe and Payson	4	567⅘	304 20
Gough	Third and Fourth	3	37	19 20
Pratt	Third and Fourth	4	185	81 85
Rear W. S. First	O'Donnell and Elliott	4	86	35 88
Spring	Lanvale and Townsend	4	209⅜	92 24
Linden avenue	North avenue and Ducatel	6	666	
		4	530	628 04
Duncan alley	Monument and McElderry	4	345¼	157 91
Rear E. S. Bolton	North avenue and Lennox	4	172⅜	89 24
Druid Hill avenue	Gold and Baker	4	135	72 11
Quaker lane	Walpert and St. Ann avenue	4	1,270¼	
Kennedy lane	Walpert and St. Ann ovenue	6	234¼	765 64
Florence	Retreat and Fulton ave	4	431⅜	161 84
Francis	Retreat and Kensett	4	370	192 53
Rear E. S. Scott	Cross and West	4	283⅜	105 20

Rear W. S. Collington ave.	Fayette and Fairmount avenue....	3	160[4]	67 93
Holbrook..	Federal and Lanvale	4	320[8]	163 29
Elliott	Second and Third	4	100	47 44
Glyndon avenue	near Carey	4	61[8]	26 58
S. S. Fort avenue	E. of Covington	4	481	214 22
Rear W. S. Smallwood	Mary Ann and Ramsay..	4	185	91 96
" W. S. Pinkney	S. of Cross	4	197[4]	99 27
Fremont	Warner and Paca	10	1,467[8]	
		4	259	
		3	148	
		2	7	
		$1\frac{1}{2}$	8	2,167 18
Twenty-first street	Barclay and North	4	148	73 95
Bloomingdale road	Lanvale and Townsend	6	592	
		4	12[4]	383 71
Rear E. S. Callow	North avenue and Lennox	4	172[8]	88 79
" N. S. Oliver	Broadway and Bethel	4	197[4]	98 12
Brunswick	Wilkens and Frederick avenues	6	592	
		4	12[4]	367 97
McElderry	Wolfe and Chapel			
Chapel	N. of McElderry	3	209[8]	
Washington	Monument and McElderry	4	380	374 02
Rear E. S. Bolton	Lennox and Reservoir	4	394[4]	143 22
Etting	Townsend and Lanvale	$1\frac{1}{2}$	21	10 88

Location, Size, Number of Feet, and Cost of Distributing Main, Laid from January 1, 1893, *to December* 31, 1893.

Street.	Between.	Size.	Length.	Cost.
North avenue	Washington and Chester	6	234⁴	
		4	234⁴	$254 54
Roland avenue	N. of Merrymans lane	6	912⁸	497 60
Andre	S. of Fort avenue	6	567⁴	
		10	6	343 18
Rear S. S. Beason	Andre and Garrett avenue	3	209⁸	81 81
" E S. Ann	Federal and Lanvale	4	185	88 89
Fifth	Hickory avenue and Falls road	6	222	143 91
E. S. Park avenue	Clay and Saratoga	4	209	
		6	3	156 55
Monroe	Edmondson and Harlem avenues	4	259	141 19
Oliver Place	Roland and Hickory avenues	4	962	
Rear N. S. Oliver Place	" " " "			423 46
Oxford avenue	York road and Frisby lane	12	456⁴	
		6	74	
		4	1,011⁴	1,280 09
Rear N. S. Harlem avenue	Kirby's lane and Monroe	4	320⁸	143 38

Eleventh	York road and Frisby lane	10	296	403 55
Baltimore	Fremont and Poppleton	10	888	
		6	12⁴	
		4	24⁸	1,041 10
Rear E. S. Clinton	N. of Tome	4	74	31 78
" E. S. Barclay	Fifth and Sixth	4	456⁴	189 19
" E. S. Luzerne	N. of Hudson	4	111	52 76
" S. L. Wilkens avenue	Smallwood and Bentalou	4	370	134 11
Chestnut Hill avenue	near Old York road	4	740	301 98
Bolton	North avenue and Lennox	10	185	
		4	12⁴	244 02
North avenue	Bolton and Linden avenue	3	61⁸	24 13
Mt. Vernon avenue	Twenty-fourth and Twenty-fifth	4	345⁴	157 11
Rear W. S. Eutaw place	Robert and Presstman	4	246⁸	133 44
Roland avenue	N. of Merryman's lane	6	185	110 28
Third avenue	Sycamore and Druid avenues	4	135⁸	85 22
Huntingdon avenue	Maryland avenue and Calvert	6	814	
		4	24⁸	678 64
Preston	Guilford avenue and the Falls	6	259	199 48
Rear S. S. North avenue	Harford avenue and Aiken	4	148	78 92
Patterson Park avenue	Belair and North avenues	6	264	173 81
Pratt	Carey and Carrollton avenue	10	61⁸	64 83
Jefferson	near Jenkins' lane	6	50	31 89
York road	Gorsuch and Calvin avenues	6	468	
		4	49⁴	400 59

Location, Size, Number of Feet and Cost of Distributing Main Laid from January 1, 1893, *to December* 31, 1893.

Street.	Between.	Size.	Length.	Cost.
Rear N. S. Federal	Broadway and Bethel	4	172⁸	$86 09
York Road	N. of Brady avenue	4	61⁸	24 72
Jefferson	and Republican streets	6	32	26 12
Lowndes	S. of Wyanoke avenue	4	209	108 66
Jefferson	Republic and Independence	6	222	128 74
Millington lane	S. of Wilkens avenue	4	370	155 03
Rear N. S. Lanvale	Broadway and Bethel	4	135⁸	65 88
" N. S. Franklin	Kirby's lane and Monroe	4	259	108 52
" S. S. Fort avenue	Jackson and Webster	4	98⁸	39 12
Lombard	Stockton alley and Carey	4	197⁴	113 16
		2	7	
Rear W. S. Charles	McComas and Donaldson	4	357⁸	151 25
Gilmor	Pratt and McHenry	4	209⁸	113 10
Rear W. S. Penna. avenue	Clifton and Fulton avenue	4	505⁸	216 84
" W. S. Holbrook	Federal and Lanvale	4	468⁸	215 23
Federal	Wolfe and Washington	6	86⁴	139 70
		4	24⁴	

Rear W. S. Guilford ave...	Twenty-third and Twenty-fourth sts.	4	468⁸	185 17
" E. S. Cannon.... ...	Baltimore and Fairmount avenue..	4	185	68 57
Milliman.....	Broadway and Ann.....	3	135⁸	78 78
Rear W. S. Edgar place...	Fayette and Fairmount avenue....	4	135⁸	54 35
Collington avenue.....	Fayette and Fairmount avenue....	4	74	29 81
Rear W. S. East avenue...	Lancaster and Hudson.....	4	135⁸	53 22
Third	Gough and Clairmount avenue	3	24⁸	17 00
	Foot of O'Donnell's wharf	4	79	54 30
Rear N. S. Lancaster.....	Robinson and East avenue.....	4	172⁸	72 74
" W. S. First.....	Second and Third avenues..... .	4	160⁴	59 54
" W. S. First.....	Elliott and Tome	4	86⁴	32 61
Pennsylvania avenue.....	and Fulton avenue.....	3	74	
		4	12⁴	
		6	111	120 74
Baker.....	Druid Hill avenue and Etting.....	4	234⁴	
		2	14	128 34
Rear S. S. Hoffman.....	Washington and Chester.....	4	160⁴	94 86
Lennox	Bolton and Park avenue	4	172⁸	93 25
Rear W. S. Druid Hill ave.	Gold and Baker.....	4	407	168 55
North avenue.....	Washington and Wolfe.....	6	185	146 58
Rear N. S. North avenue..	Park avenue and Bolton	4	123⁴	
		2	7	79 33
Rear S. S. White.	Monroe and Payson	4	222	84 76
Baltimore.....	and McClellan's alley	1½	55	
		3	12⁴	35 60

Location, Size, Number of Feet, and Cost of Distributing Main, Laid from January 1, 1893, *to December* 31, 1893.

Street.	Between.	Size.	Length.	Cost.
Wilkins street	Frederick road and Lombard	6	764.8	
		4	24.8	$550 70
Fulton avenue	Baker and Presbury	6	505.8	
		4	74	339 88
Carrollton avenue	Saratoga and Mulberry	6	98.8	78 06
Rear W. S. Second	Tome and First avenue	3	140	51 33
Holliday	Saratoga and Lexington	6	370	
		3	49.4	412 98
Hudson	and Bouldin	2	72	
		4	24.8	48 51
Rear E. S. Dallas	Lanvale and Townsend	4	567.4	267 66
" E. S. Canton avenue	Lancaster and Aliceanna	4	209.8	78 12
" S. S. Huntingdon ave.	York road and Barclay	4	234.4	109 39
Fifth	Gough and Clairmount	4	394.8	180 89
Rear E. S. Jackson	Clement and Ostend	4	333	186 46
Barney	Elizabeth lane and Patapsco	3	172.8	80 67

From the corner of	Randall and William, thence along	12	2,412[6]	
William to Clement	to Covington, to Fort avenue	6	1,776	
Durst alley	Clement and Randall	4	111	
Hall alley	Clement and Randall	3	24[8]	
		2	21	
		1½	3	5,552 76
North avenue	N. of Madison avenue	1½	50	22 82
Rear S. S. Jefferson	Collington ave. and Madeira alley	4	271[4]	147 36
Park avenue	N. of Reservoir	4	98[8]	46 77
Rear N. S. Lanvale	Spring and Caroline	4	172[8]	82 93
" S. S. Biddle	Broadway and Bond	4	135[8]	74 40
Appleton	Harlem avenue and Lanvale	4	468[8]	235 06
Ostend	Hanover and Clarkson	6	123[4]	
Rear W. S. Hanover	Ostend and Clement	4	111	140 49
N. S. Fayette	W. of Schroeder	4	123[4]	74 86
Rear N. S. Lanvale	Broadway and Regester	4	98[8]	43 55
Rear N. S. Edmondson ave.	Monroe and Kirby's lane	4	271[4]	111 00
Maryland avenue	Sixth and Seventh streets	4	160[4]	74 34
Rear W. S. Bolton	Lennox and Reservoir	4	542[8]	233 45
Rear W. S. North avenue	Park avenue and Bolton	4	61[8]	40 86
Merryman's lane	E. of Roland avenue	4	320[8]	153 33
Reservoir street	Park avenue and Bolton	4	234[4]	113 85
Rear E. S. Guilford ave.	North avenue and First	4	333	140 98
Erdman lane	W. of Belair avenue	6	1,171[8]	
		4	18	784 75

Location, Size, Number of Feet, and Cost of Distributing Main, Laid from January 1, 1893, *to December* 31, 1893.

Street.	Between.	Size.	Length.	Cost.
Burke	Baltimore and Fairmount avenue	4	111	$ 42 57
Rear W. S. Holbrook	Oliver and Federal	4	148	63 27
Rear N. S. Preston	Guilford avenue and the bridge	4	271⁴	109 68
Cottage avenue	York road and Quaker lane	6	246⁸	180 28
Wilson	Etting and Division	4	148	
		2	35	124 39
Frisby	Brady avenue and Eleventh street	6	111	75 24
Frisby	Oxford avenue and Cottage avenue	6	234⁴	140 77
Lamont	Brady avenue and Eleventh street	4	172⁸	116 55
Rear N. S. White	Monroe and Payson	4	148	61 02
Rear N. S. Preston	Charles and Lovegrove alley	3	98⁸	
		4	24⁴	85 28
Monroe	Harlem avenue and Lanvale	4	111	79 03
Raborg	Carey and Woodyear	6	271⁸	204 22
Greenmount avenue	and Twenty-fourth street	6	111	110 83
Mount	Presbury and Northwest street	4	283⁸	
		3	37	153 66

Belair avenue	N. of Brehm's lane	4	300	183 54
Rear W. S. Chester	Townsend and North avenue	4	61[s]	28 47
Rear W. S. Broadway	Oliver and Federal	4	86[s]	45 26
" N. S. Third	Calvert and Guilford avenue	4	246[s]	124 73
Hampson	Linden avenue and Bolton	4	49[s]	29 31
Burke	Baltimore and Fairmount ave.	4	111	53 44
Madison	Liberty and Independent	6	308[s]	191 04
Independent	Washington and Gorsuch ave.	6	201[s]	117 93
Rear E. S. Caroline	Lanvale and Townsend	4	208	94 61
" N. S. Orleans	Burke and Bradford alley	4	592	271 58
" W. S. Washington	Madison and Chew	4	283[s]	145 47
Carroll avenue	E. of Old York road	6	394[s]	237 58
Tessier	Orchard and Biddle	3	30	20 05
Bloom	Madison avenue and McCulloh	4	63	43 02
Rear E. S. Ensor	Oliver and Federal	4	246[s]	116 18
Bloom	McCulloh and Stoddard alley	4	70	51 05
Holbrook	Hoffman and Oliver	4	111	78 37
Rear W. S. Hanover	West and Ostend	4	197[s]	
		6	12[s]	115 83
Rear N. S. Jefferson	Burke and Bradford alley	4	271[s]	133 84
" E. S. Mt. Royal ave.	Mosher and McMechen	4	296	140 61
" W. S. Washington	Federal and Lanvale	4	185	
		6	3	92 32
Rear W. S. Monroe	Booth and Hollins	4	148	76 71
" S. S. Huntington ave.	York road and Buchanan	4	259	115 63

Location, Size, Number of Feet and Cost of Distributing Main, Laid from January 1, 1893, *to December* 31, 1893.

Street.	Between	Size.	Length.	Cost.
Rear W. S. Burke	Monument and Milliman	4	370	$174 22
Chew	W. of Ann	4	56	37 65
Rear E. S. Linden ave	Reservoir and Ductatel	4	135⁸	61 99
" E. S. Washington	Madison and Chew	4	357⁸	
		3	3	181 08
Pulaski	Wilkens avenue and Christian	4	86⁴	58 77
Augusta avenue	Payson and Pulaski	4	394⁸	172 34
North avenue	Madison and McCulloh	3	40	25 03
North avenue	Fourth and Fifth streets	4	239⁴	134 22
Wooster	Warner and Russell			
Russell	N. of Wooster	4	502	222 54
Rear N. S. O'Donnell	Potomac and Hare	4	185	90 81
Boone	Oxford and Brady avenues	4	407	
Rear N. S. Oxford avenue	Boone and Frisby	6	382	
Frisby	Brady and Oxford avenues			433 65
Rutter alley	Mosher and McMechen	4	197⁴	134 18
Little William	Heath and Barney	4	12⁴	15 57

Oxford avenue	E. of Frisby	6	209⁸	155 19
Rear S. S. Edmondson ave.	Monroe and Payson	4	123⁴	70 15
" N. S. Lanvale	Spring and Eden	4	74	31 31
Bartlett	Quaker and Kennedy lanes	3	131⁴	44 83
Washington	W. of Taylor	4	37⁴	21 40
Rear N. S. Harlem avenue.	Monroe and Appleton	4	246⁸	145 65
Lanvale	Aisquith and Holbrook	6	222	
Holbrook	Point lane and Lanvale	4	148	248 60
Seventh street	S. of Eastern avenue	3	168⁴	92 53
Rear N. S. Fairmount ave.	Burke and Port alley	4	86⁴	54 39
Pratt	Third and Fifth streets	4	98⁸	46 05
Rear W. S. Payson	Pratt and McHenry	4	197⁴	125 45
" E. S. Burke	Fairmount avenue and Baltimore	4	259	139 70
Ann	Federal and Lanvale	4	24⁸	17 06
Rear W. S. Jenkins' alley.	N. of Camel alley	2	28	17 75
" N. S. Fairmount ave.	Cannon and Rose	4	74	44 73
" W. S. Madeira alley.	Pratt and Lombard	3	15	8 48
Chester	Gay and Lanvale	6	209⁸	177 62
North avenue	Bolton and Linden avenue	3	49⁴	26 68
Rear W. S. Mount	Harlem avenue and Lanvale	3	185	100 94
Bruce alley	S. of Cairo	4	12⁴	11 88
Rear S. S. Oliver	Regester and Ann	4	320⁸	145 65
Clement	Clarkson and Hanover			
Clarkson	Ostend and Fort avenue	6	259	
Rear N. S. Clement	Race and Hanover	4	542⁸	
Rear S. S. Clement	" "	3	308⁴	543 40

Location, Size, Number of Feet, and Cost of Distributing Main, Laid from January 1, 1893, *to December* 31, 1893.

Street.	Between.	Size.	Length.	Cost.
Rear W. S. Appleton	Harlem avenue and Lanvale	4	308 4	$146 90
O'Donnell	Third and Fifth streets	4	61 8	31 97
Rear E. S. Calvert	Federal and Lanvale	4	407	188 75
Fayette	Little Sharp and McClellan's alley	6	143 4	
		4	6	121 21
Third avenue	Falls road and Chestnut avenue	6	74	47 91
York road	Brady avenue and Tenth street	4	345 4	
		6	3	198 12
Plum alley	West and Stockholm	4	209 8	
		3	3	111 58
Maryland avenue	N. of Huntington avenue	4	189	94 03
Rear W. S. Monroe	Harlem avenue and Lanvale	4	283 8	122 52
Rear W. S. Appleton	Edmondson and Harlem avenues	4	209 8	99 17
		....	61,572 10	$38,756 54

STATEMENTS.

Engineer and Superintendent's Report,

COUNTY DIVISION.

BALTIMORE CITY WATER WORKS.

TABLE OF RAINFALL IN INCHES.

1893.	*Jones' Falls Supply.*			*Gunpowder Supply.*		
	Lake Roland.	Hampden Reservoir.	Druid Lake.	Mt. Royal Reservoir.	Loch Raven.	Lake Montebello.
January.....	2.15	1.80	1.64	1.80	2.18	1.97
February....	4.50	4.61	4.70	4.40	4.60	4.38
March	1.25	1.55	1.74	1.48	1.44	1.48
April	3.50	3.24	3.81	3.23	3.58	3.55
May	4.75	4.86	4.80	4.77	4.83	4.89
June	4.00	4.29	3.98	2.49	4.05	2.56
July	1.73	2.40	2.01	2.04	2.47	3.55
August.....	2.70	2.30	1.91	1.78	3.62	2.15
September...	2.00	2.58	2.56	2.88	2.77	2.17
October	4.55	4.50	4.63	4.50	4.39	4.07
November...	4.70	4.30	4.29	4.24	4.63	3.96
December....	2.45	2.62	2.56	2.31	2.58	1.65
Total	38.28	39.05	38.63	35.92	41.14	36.38

Respectfully submitted,

WILLIAM BENTHALL.

Gunpowder Water Supply for the Year Ending December 31, 1893.

MONTH.	NUMBER OF GALLONS.								
	Clear Water Over Loch Raven Dam.	Muddy Water Over Loch Raven Dam.	Waste Water From Bottom Gates Loch Raven Gate House.	Clear Water Sent to Lake Montebello From Loch Raven.	Total Flow of the Gunpowder Per Month.	Average Flow of Stream Per Day.	Average Sent to City Per Day.	Pumped From Eastern High Service Pumping Station.	Rain Fall in Inches.
January	3,922,000,000	1,128,000,000	1,748,000,000	1,566,000,000	8,364,000,000	270,000,000	30,000,000	103,632,240	2.
February	1,846,000,000	6,560,000,000	1,570,000,000	944,000,000	11,020,000,000	394,000,000	29,821,429	119,133,818	4.5
March	3,260,000,000	5,350,000,000	1,748,000,000	1,134,000,000	11,492,000,000	371,000,000	28,367,742	99,164,586	1.5
April	3,118,000,000	2,732,000,000	1,680,000,000	1,224,000,000	8,754,000,000	292,000,000	30,320,000	117,062,240	3.5
May	4,967,000,000	6,127,000,000	1,748,000,000	1,350,000,000	14,192,000,000	458,000,000	29,832,258	102,794,479	4.9
June	1,884,000,000	3,436,000,000	1,680,000,000	1,098,000,000	8,098,000,000	270,000,000	29,200,000	142,640,116	3.3
July	1,833,000,000	760,000,000	1,719,000,000	832,000,000	5,144,000,000	166,000,000	28,000,000	132,630,802	3.
August	852,000,000	1,610,000,000	807,000,000	1,107,000,000	4,377,000,000	141,000,000	28,550,000	129,656,764	2.8
September	2,339,000,000	408,000,000	1,128,000,000	1,117,000,000	4,992,000,000	164,000,000	29,000,000	134,079,217	2.5
October	2,358,000,000	1,787,000,000	1,165,000,000	1,200,000,000	6,510,000,000	210,000,000	27,000,000	119,240,173	4.25
November	3,120,000,000	2,151,000,000	1,128,000,000	1,200,000,000	7,599,000,000	253,000,000	28,050,000	89,348,528	4.5
December	3,460,000,000	454,000,000	1,165,000,000	1,366,000,000	6,445,000,000	208,000,000	28,242,000	112,513,586	2.5
Totals	32,959,000,000	32,503,000,000	17,286,000,000	14,138,000,000	96,987,000,000	266,416,667	28,865,286	1,401,896,549	39.25

Jones' Falls Supply for the Year Ending December 31, 1893.

MONTH.	NUMBER OF GALLONS.									
	Clear Water Over Lake Roland Dam.	Muddy Water Over Lake Roland Dam.	Water From Bottom Gate Lake Roland Gate House.	Clear Water Sent Through Conduit Gate Lake Roland.	Total Flow of Jones' Falls Per Month.	Average Flow of Stream Per Day.	Average Sent to City Per Day.	Sent to City From Both Supplies Per Day.	Pumped to High Service Reservoir From Druid Lake.	Rain Fall in Inches.
January	141,000,000	120,000,000	.....	524,000,000	785,000,000	25,300,000	16,000,000	46,000,000	57,769,800	1.8
February	334,000,000	61,000,000	294,000,000	479,000,000	1,168,000,000	42,000,000	16,500,000	46,321,429	44,615,100	4.5
March	342,000,000	.....	305,000,000	574,000,000	1,221,000,000	39,400,000	17,861,290	46,229,032	64,295,510	1.5
April	307,000,000	.....	117,000,000	589,000,000	1,013,000,000	33,600,000	18,360,000	48,680,000	52,218,450	3.5
May	433,000,000	116,000,000	302,000,000	607,000,000	1,458,000,000	47,000,000	19,774,200	49,606,458	97,814,250	4.8
June	67,000,000	66,000,000	34,000,000	681,000,000	848,000,000	28,300,000	22,700,000	51,900,000	104,298,450	3.6
July	73,000,000	.....	.....	619,000,000	544,000,000	17,500,000	20,645,161	48,645,161	101,220,300	2.1
August	.....	.....	.....	585,000,000	279,000,000	9,000,000	19,700,000	48,250,000	105,631,350	2.2
September	.....	.....	.....	500,000,000	300,000,000	10,000,000	18,112,000	47,112,000	83,629,600	2.5
October	.....	.....	.....	630,000,000	856,000,000	27,600,000	18,968,000	46,894,000	77,225,750	4.5
November	.....	.....	.....	656,000,000	936,000,000	31,200,000	19,600,000	47,650,000	67,912,000	4.5
December	274,000,000	.....	55,000,000	548,000,000	877,000,000	28,300,000	17,420,000	45,662,000	38,839,950	2.5
Totals	1,971,000,000	363,000,000	1,107,000,000	6,992,000,000	10,285,000,000	28,266,667	18,803,388	47,745,840	895,470,510	38.0

BOARD OF COMMISSIONERS OF PUBLIC SCHOOLS

FOR 1893.

OFFICERS:

PRESIDENT.....JOHN T. MORRIS.
SECRETARY.....HENRY M. COWLES.
SUP'T OF PUBLIC INSTRUCTION.....HENRY A. WISE.
ASSISTANT SUP'T OF INSTRUCTION.....JOHN E. McCAHAN.
ASSISTANT SECRETARY.....ALBERT MARSHALL.
SUPERINTENDENT OF SUPPLIES.....CHRISTIAN W. KEIDEL.
LIBRARIAN.....FRANCIS J. RUTH.
CLERK TO SECRETARY, (April 1).....WILLIAM F. O'CONOR.

MEMBERS OF THE BOARD:

HON. FERDINAND C. LATROBE, MAYOR.

Ward.			*Term Expires.*
1.	(*a*)	GEORGE E. KEENAN	1897
2.		SIMON L. FELBER	1895
3.		JOHN B. WENTZ	1896
4.	(*b*)	EDWARD A. BURKE	1894
5.		WILLIAM H. B. FUSSELBAUGH, OF J	1897
6.	(*c*)	JOHN WEBER	1896
7.		FRANK H. KAMPE	1894
8.		JOHN T. FOLEY	1895
9.		MICHAEL SHEEHAN	1895
10.		JOHN T. MORRIS	1894
11.		WILLIAM W. DIX	1896
12.		JAMES W. DENNY	1897
13.		CHARLES J. WIENER	1895
14.		JAMES BOSLEY, M.D	1896
15.		JOHN H. CARLE	1897
16.		JOHN B. BIEMILLER	1894
17.		JOSEPH P. McGONIGLE	1896
18.		ROBERT H. CORNTHWAITE	1894
19.	(*d*)	HENRY ALLNUTT	1895
20.		JAMES L. MURRILL	1897
21.		DANIEL W. SMITH, M.D.	1897
22.		ARTHUR H. JACKSON	1897

(*a*) Resigned November 14. On November 20 the City Council elected Joseph L. Farnen to represent the First Ward.
(*b*) Died December 31. On January 16, 1894, the Board, and on January 22, 1894, the City Council elected George F. Louderman to represent the Fourth Ward.
(*c*) Resigned November 13. On November 20 the City Council elected John T. Ochs to represent the Sixth Ward.
(*d*) Resigned March 14. On March 27 the City Council elected Merville H. Carter, M.D., to represent the Nineteenth Ward.

STANDING COMMITTEES.

Messrs. Farnen, Louderman, Ochs and Carter succeeded Messrs. Keenan, Burke, Weber and Allnutt as members of the respective committees.

1. Baltimore City College.
Messrs. Foley, Bosley, Denny, Allnutt, President and Superintendent.

2. Female High Schools.
Messrs. Wentz, Wiener, Fusselbaugh, Dix, Murrill, Weber, President and Superintendent.

3. Grammar Schools.
Messrs. Fusselbaugh, Keenan, Allnutt, Sheehan, Weber, President and Superintendent.

4. Primary Schools.
Messrs. Smith, Dix, Foley, Kampe, Burke and Assistant Superintendent.

5. English-German Schools.
Messrs. Felber, Wentz, Wiener, Biemiller and Weber.

6. Manual Training School. (Polytechnic Education).
Messrs. Wentz, Felber, Sheehan, Dix, Murrill, President and the Mayor.

7. Colored Schools.
Messrs. Dix, Denny, Smith, Keenan, Cornthwaite and Superintendent.

8. Normal School.
Messrs. Allnutt, Murrill, Wiener and Superintendent.

9. Text Books.
Messrs. Denny, Wentz, Bosley, Wiener, Jackson, President, Superintendent and Assistant Superintendent.

10. Furniture.
Messrs. Jackson, Allnutt, Kampe, Dix and McGonigle.

11. Music.
Messrs. Wentz, Felber, Foley, Carle and Biemiller.

12. Discipline.
Messrs. Biemiller, Dix, Carle, Fusselbaugh, Felber, President, Superintendent and Assistant Superintendent.

STANDING COMMITTEES—*Concluded.*

13. Accounts.
Messrs. Murrill, Wiener, Burke, Fusselbaugh and McGonigle.

14. Expenditures.
Messrs. Burke, Carle, Smith, Bosley, Weber and President.

15. Examinations.
Messrs. Cornthwaite, Smith, Dix, President, Superintendent and Assistant Superintendent.

16. Bi-Weekly Reports.
Messrs. Kampe, Burke and Sheehan.

17. Conference.
Messrs. Weber, Denny, Jackson, Felber and Biemiller.

18. Buildings.
Messrs. Carle, Bosley, Cornthwaite, Sheehan, McGonigle, President, Superintendent and Assistant Superintendent.

19. Printing.
Messrs. Foley, Biemiller and Kampe.

20. Health.
Messrs. Bosley, Smith and Murrill.

21. Drawing.
Messrs. Sheehan, Allnutt, Murrill, Cornthwaite and Keenan.

22. Intestates' Estates.
Messrs. Wiener, Wentz and Keenan.

23. Heating Apparatus and Fuel.
Messrs. McGonigle, Cornthwaite, Burke, Allnutt, Kampe and President.

24. Rules.
Messrs. Denny, Wentz and Fusselbaugh.

25. Public School Library.
Messrs. Wentz, Allnutt, Foley, Dix and President.

26. Non-Resident Pupils.
Messrs. Keenan, Jackson and President.

27. Half-Time Schools. (March 14).
Messrs. Foley, Wiener, Sheehan, President, Superintendent and Assistant Superintendent.

28. Night Schools. (November 14).
Messrs. President, Cornthwaite, Carle, Foley and Wentz.

REPORT

—OF THE—

Board of Commissioners of Public Schools

OF BALTIMORE.

OFFICE OF COMMISSIONERS OF PUBLIC SCHOOLS,

January 1st, 1894.

The Mayor and City Council
of Baltimore:

In compliance with the law, the Board of Commissioners of Public Schools respectfully presents its Sixty-fifth Annual Report for the year ending December 31st, 1893, showing the work, condition and wants of the schools.

The accompanying reports of the Superintendent of Public Instruction and the Assistant Superintendent contain detailed information with reference to the work of the schools, and valuable suggestions for their further development and improvement.

The report of the Committee on Accounts, and the Secretary's statement, furnish a full account of receipts and expenditures during the past year.

The object of the law which directs the Board to make an annual report of its transactions is to enable the city authorities to ascertain the true condition of the schools, and thus to intelligently estimate and supply their wants. It is therefore the duty of the Board to fully and frankly report what has been actually accomplished, thereby showing what progress has been made, and what hindrances exist, if any, to the full development of our system of public education. The complete success of a school system, like any other public interest, depends on the earnest and harmonious action of all who are engaged in the work. It is necessary for those in authority who furnish the means for the support of the schools to cordially co-operate with those who are entrusted with their management and supervision. This principle has been happily exemplified during the past year in the cordial relation which has existed between the city authorities and those in charge of our public schools. A liberal spirit has been shown by prompt responses to the requirements of the schools, and it is hoped that the same spirit of liberal appropriations will continue during the present year.

SCHOOL STATISTICS.

The whole number of schools during the year was 170, of which 160 were day schools under the charge of 1,464 teachers, and 10 evening schools under 32 teachers, classified as follows:

		Teachers.	Pupils.
1	Baltimore City College	15	539
2	Female High Schools	27	976
1	Polytechnic Institute	18	486
41	Grammar Schools	349	13,439
66	Primary Schools	536	21,341
5	English-German Schools	135	5,493
22	Annex Schools	171	7,148
21	Colored Schools	183	7,539
1	Colored Manual Training School	6	87
10	Evening Schools	32	1,202

From this statement it will be seen that there were 57,048 enrolled pupils in the day schools and 1,202 in the evening schools, making the total number on roll at the end of the year 58,250, under the charge of 1,496 teachers.

The average attendance in the day schools was 45,846, and in the evening schools 1,089, and the whole number of pupils who attended the day schools during the year, exclusive of duplicate enrollments, was 69,425, and the average roll in the evening schools was 1,686. There was an increase of 72 teachers and 2,642 pupils in the day schools, and a decrease of 6 teachers and 211 pupils in the evening schools, being a total net increase of 66 teachers and 2,431 pupils during the past year.

The percentage of attendance in the day schools was

85, ranging from 94 in the Polytechnic Institute to 78 in the Colored Schools, as follows: Polytechnic Institute, 94; Baltimore City College, 92; Female High Schools, 93; Male Grammar Schools, 90; Female Grammar Schools, 87; English-German Schools, 90; Male Primary Schools, 85; Female Primary Schools, 82; Annex Schools, 81; Colored Manual Training School, 84; Colored Schools, 78.

A serious obstacle to improvement in all public schools is the irregular attendance of pupils. It is a constant complaint of teachers that the children are too often permitted to be absent without proper cause, and thus serious injury results to the absentees, and the general success of the schools is impeded. The statement of these results should induce all parents to discourage this pernicious practice, and to cordially co-operate with teachers in securing prompt and punctual attendance of their children, and thus increase the average attendance in the schools.

The whole number of non-resident pupils in the schools during the year was 216, and on roll at the end of the year 143, being less than during the previous year, and the amount received from them for tuition and use of books was $3,456.50. The public schools of Baltimore were established for the education of children whose parents or guardians are residents of the city, and they are entitled to attend free

of any charge; but the children of non-residents are only admitted on the annual payment in advance of the fees prescribed by the ordinance, namely: Baltimore City College, $50; Polytechnic Institute, $50; Female High Schools, $32; Grammar Schools, $16; Primary Schools, $12.

The average per capita cost of the pupils in all the schools, estimated on enrollment and current expenses, was $18.55, and in the several grades was as follows:

Baltimore City College	$ 67 86
Female High Schools	30 67
Male Grammar Schools	22 30
Female Grammar Schools	17 88
English-German Schools	16 44
Male Primary Schools	14 58
Female Primary Schools	14 68
Polytechnic Institute	51 47
Annex Schools	16 78
Colored Manual Training School	85 67
Colored High and Grammar Schools	19 76
Colored Primary Schools	15 24

The average annual salary of the teachers was $572.29, being less than the salaries of teachers in the public schools of other cities.

FINANCIAL STATEMENT.

The estimate submitted by the Board for the current expenses of 1893 was $1,053,681, of which $936,681

was for the schools in the first twenty wards, and $117,000 for Annex Schools. The full amount of the estimate was appropriated, and also the additional sum of $4,860 for special expenses of the School Exhibit at the World's Exposition, making a total appropriation of $1,058,541.

The total amount expended was $1,053,676.31, of which $920,038.08 was for white schools, and $133,637.37 for colored schools, and $4,726.73 for School Exhibit at the World's Exposition, leaving an unexpended balance of $137.96.

RECEIPTS.

The total receipts for current expenses of the schools were as follows:

From City Collector, taxes	$793,658	49
" State Treasurer, taxes	213,941	58
" Non-resident pupils	3,456	50
" John F. Plummer, interest on legacy	114	50
" All other sources	42,505	24
	$1,053,676	31

The amounts received from the State Treasurer and City Collector were more than during the previous year.

STATE SCHOOL TAX.

The receipts from the City Collector arise from the annual tax levied on all property in Baltimore city

for the support of the public schools; the amount during the past year being 32 cents on every $100 of taxable property.

The amount annually received from the State Treasurer arises from a tax of 10½ cents on every $100 of assessable property throughout the State. This fund is paid to the State for the support of the public schools, and is afterwards distributed by the State Treasurer between the counties of the State and Baltimore city, in proportion to the population between the ages of five and twenty years. The report of the State Comptroller shows that during the last fiscal year, ending September 30th, 1893, the amount received for Baltimore city from this source was $269,311.81, and the amount apportioned and paid to the city as its share of this tax was $204,360.11, making the excess paid by the city $64,951.70.

In 1892 the excess paid by the city was $103,867.92, and during previous years the amounts were even much larger. This apportionment of the Public School Tax is made in accordance with the provisions of the Acts of the General Assembly of Maryland, passed in 1872 and 1878, and it will thus appear that for many years the city has been largely taxed for the support of the public schools of the counties. The money thus contributed by our citizens is applied to a good purpose,

and aids in the general diffusion of knowledge throughout the State; but this fact can hardly be deemed a justification of the inequality of this distribution, which is unjust to our city.

At the last session of the General Assembly an Act was passed reciting the existence of "gross inequalities in the distribution of the State School Tax," and directing the Governor to appoint a commission consisting of five persons, residents of different sections of the State, to inquire into the present mode of distribution and report the results of their investigation. The commission appointed by the Governor has carefully and thoroughly examined the subject of the present system of distribution, but have not been able to unanimously agree upon any other mode. Whilst recognizing the existence of the alleged inequality, and admitting that our city contributed a very large portion of the fund for distribution among the counties, the minority of the commission was not willing to recommend any change which would diminish the contribution to be paid by the city. The majority of the Commission has agreed to recommend that the present mode of distribution be abolished, and that the apportionment of the tax shall be made on the basis of the total number of different pupils annually enrolled in the public schools—the fund for the support of the white schools, and that for the support of the colored schools to be apportioned separately. The

practical results of this plan would be an annual census of public school children, and a more equitable apportionment of the school tax, by which Baltimore city would receive a larger share of the tax than is now apportioned to it under the existing mode of distribution. It is hoped that the General Assembly may be induced to adopt this recommendation, and thus, in some degree, to remedy the existing inequality.

EXPENDITURES.

The total amount paid by the Board was $1,058,-403.04, and by the Inspector of Buildings for new school-houses and repairs of old ones, was $67,356.87, as follows:

Salaries of officers and teachers	$749,502 95
Rents	7,082 83
Books and stationery	47,355 99
Heating apparatus	10,545 84
Furniture	27,820 31
Fuel	28,820 08
Repairs and cleaning	11,614 95
Incidentals, printing, etc.	13,207 64
Polytechnic Institute	25,015 89
Colored Manual Training School	7,453 20
Annex Schools, for salaries	95,883 25
" " other items	24,116 43
Evening Schools	5,256 95
School Exhibit at World's Exposition	4,726 73
	$1,058,403 04

The expenditures by the Inspector of Buildings were as follows:

New buildings in the first twenty wards...		$12,618 76
Repairs of old houses.....		27,890 72
		$40,509 48
New buildings in the Twenty-first and Twenty-second Wards..... ....$23,847 39		
Repairs of old houses	3,000 00	$ 26,847 39
		$ 67,356 87

The total amount expended by the Board and the Inspector of Buildings on account of public schools in 1893 was $1,125,759.91.

Although one or more new school-houses are erected every year, yet there are many old buildings that require annual repairs under the direction of the Inspector of Buildings, and the Board therefore asks that a liberal appropriation be made to his department for this purpose.

ESTIMATE FOR 1894.

The estimate for current expenses of the schools for 1894 is $1,150,815, of which $138,300.00 is for Annex Schools, as follows:

For First Twenty Wards.

Salaries of officers and teachers	$	800,500 00
Rent of buildings		8,000 00
Books and stationery		52,000 00
Heating apparatus		14,000 00
Furniture		25,700 00
Fuel		33,000 00
Repairs and cleaning		14,000 00
Printing, incidentals, etc		15,000 00
Evening Schools		10,000 00
Polytechnic Institute		30,910 00
Colored Manual Training School		9,405 00
		$1,012,515 00

Twenty-first and Twenty-second Wards.

Annex Schools, salaries	110,000		
" " other expenses	28,300	138,300 00	
		$1,150,815 00	

The above estimate is in excess of the expenditures last year, but is fully justified in view of the expected increase in the number of pupils during this year. The increase last year was greater than during any previous year in the history of the schools, and it is probable that it will be even much greater during this year.

The increase in the number of pupils necessarily requires the appointment of many new teachers, the purchase of more furniture and books, and other

school appliances, and erection of new houses, all of which necessitate increased appropriations. Our citizens are invited to send their children to our public schools, and to co-operate with us in the important work of free education, and the city should therefore make ample provision for their proper support and development by liberal appropriations. There is no tax which our citizens pay more willingly than that which is levied for the support of our public schools, and they, therefore, should be gratified in their demand for healthy and comfortable school houses, and all other appliances that are necessary to successfully conduct the schools.

In our last report we recommended that the appropriation be made for salaries in one item, and that all the other current expenses be included in one amount for support of the schools, which the Board might apply in its discretion to the several accounts without the necessity of obtaining special authority to transfer from one account to another. The appropriation made in this way last year, in compliance with the request, was very satisfactory, and it is hoped that future appropriations will be made in the same manner.

SCHOOL HOUSES.

There are one hundred and twelve buildings occupied by the schools, of which eighty-eight are owned

by the city, and twenty-four are rented, and the amount paid for rent during the year was $7,082.83.

The statement of the Secretary shows the location of all the schools, size of the lots and buildings, amount of ground rent on each lot, estimated value of the buildings, and date of their erection; and the inventory prepared by the Superintendent of Supplies and accompanying his report contains a list of all the furniture of every kind in the schools, valued by him at $277,141.00, on the basis of two-thirds of the original cost.

The estimated value of the school houses and lots, subject to the ground rents on some of the lots, is $2,157,212.07. The total amount of ground rents on all the school houses owned by the city, is $33,234.79 per annum, which is now charged to city property and paid by that department. Most of the ground rents on school houses erected prior to 1890 are irredeemable, but since that date the lots have been purchased in fee or leased on ground rents redeemable at the pleasure of the city at six per cent.

Four new school houses were completed during the past year, and were occupied at the opening of the schools in September, and in addition to these, a new house has been commenced at Walbrook for the use of Annex School No. 15, and will be finished during this year. The new buildings heretofore authorized

for English-German School No. 6, and Colored School No. 8 will be erected during this year.

During the last ten years twenty-eight new school houses have been erected, and yet there is not sufficient room to comfortably accommodate the pupils of the schools; and during the past year it was necessary to rent twenty-four dwellings or halls for their use. This may seem strange to those who are not familiar with the growth of the schools, but it may easily be understood when it is known that during the same period of ten years there was an increase of 19,502 pupils and 609 teachers.

Most of the new houses are intended for the use of existing schools which occupy old buildings, and whilst they furnish better and more comfortable accommodations for the teachers and pupils, they seldom have additional class-rooms for an increased number of pupils.

It is the general complaint that our school houses are too small because the appropriations are not sufficient to erect larger ones. It would be better policy to select larger lots and erect more commodious school houses to accommodate not only the pupils now in the schools, but the future increase. The lots should contain at least twenty-five thousand square feet, and not less than $30,000 should be appropriated for a new building, which would tend to relieve the city of the necessity for enlarging the buildings at increased cost.

The board regrets the necessity for using any rented buildings, as they are generally unsuited for school use and detrimental to the health of the teachers and pupils. Many of the teachers have been performing their work under serious disadvantages in consequence of the unhealthy buildings which they have been compelled to occupy.

In this relation we repeat what has heretofore been stated in previous reports—that the proper remedy for this evil is the erection of more school houses, until the existing want is fully supplied. It is true that the Board might pass an order that the seating capacity of the present buildings should be ascertained, and that when all these seats are occupied no more children shall be admitted to the schools, and that no dwellings or halls shall be rented for school use. This plan would necessarily exclude a large number of children from the schools, and would probably create ill-feeling among their parents and cause severe criticism of the city authorities for alleged neglect to provide the necessary school houses. We desire to avoid this criticism, and therefore have continued the temporary use of rented buildings, with the hope that this statement of the condition of some of the schools will enable you to appreciate our reason for again asking further appropriations for the erection of new houses during this year.

BALTIMORE CITY COLLEGE.

Appropriations were made from the $6,000,000 loan for the purchase of lots and erection of new buildings for Baltimore City College and Western Female High School.

When $200,000 were appropriated for the college it was supposed that the amount might be sufficient for the purpose, though it was much less than the cost of similar buildings in other cities.

The report of the Commission to the City Council in October, 1893, showed that they had examined a number of lots which had been offered for the college site, but they had not selected one because the appropriation of $75,000 was not sufficient to purchase the property which was the most desirable of all that was examined. The Commission was also of the opinion that the appropriation of $125,000 was insufficient to erect a suitable building commensurate with the wants of the school. The principal of the college submitted a statement of the number and size of class-rooms which would be required, and competent architects were consulted with reference to the building, who prepared a suitable plan, and their estimate of the cost was nearly double the amount of the appropriation.

Under the circumstances the Commission reported the facts and submitted the whole matter to the

City Council with the hope that the appropriation would be increased at least $100,000 for the lot and building. Upon inquiry it was learned that the cost of similar buildings recently erected in other cities was much larger than this increased estimate would be, and we believe that our city is able to appropriate as much for this purpose as other cities have done.

Our citizens are deeply interested in the future growth and success of the college, and are earnest in their wish that the new building may be commodious in every respect, and have all the modern improvements which may be found in any school building of the same grade in our country. It is therefore again recommended that an additional appropriation of $100,000 be made so that the work may be commenced at an early period and the new building may be completed and occupied next year.

WESTERN FEMALE HIGH SCHOOL.

It is gratifying to the friends of this school to learn that a desirable lot at the corner of Lafayette avenue and McCulloh street has been selected as the site for the new school building, and the plan has been prepared by the Inspector of Buildings, conformable to the recommendation of the principal of the school. This building should be constructed of the best materials, and by reliable builders, and it is hoped that the appropriation of $100,000 may be sufficient

for this purpose; but if it should be insufficient, it is confidently believed that the additional amount required will be promptly appropriated.

It is a just complaint that the appropriations for new school houses are often too small to induce the best builders in our city to bid for the work, and the result has often been that inferior builders obtain the contracts and inferior houses are erected, which soon need repairing. It would be very desirable to avoid this objectionable condition in the future by making proper appropriations sufficient to pay a fair price for labor and materials.

EASTERN FEMALE HIGH SCHOOL.

The report of the principal states that "this school is suffering for want of adequate accommodations." The number of pupils was four hundred and forty-six, being an increase over the previous year; and there are fourteen teachers and only eleven class-rooms. The result is that several teachers have been without separate class-rooms, and have been performing their work under disadvantageous circumstances.

The matter will be considered this year, and application will probably be made for an appropriation to furnish the desired accommodations for this useful school.

BALTIMORE POLYTECHNIC INSTITUTE.

The number of enrolled students at the close of the year was 486, being an increase of 101 over the previous year. The number admitted from public schools was 194, and from private schools was 167.

A forty horse-power "Atlas" engine was built by the graduating class, and is a specimen of superior skill and workmanship, and very creditable to the institute; and the work of the students in all the departments is very satisfactory.

The increase in the number of students suggests the necessity for more class-rooms and work-shops, and it is recommended that the property adjoining the present building be purchased for this purpose.

GRAMMAR AND PRIMARY SCHOOLS No. 9.

In previous reports your attention was called to these schools, which are occupying rented dwellings on Calvert street and Courtland street. It is now absolutely necessary either to make an appropriation for a new house for these schools or that they shall be closed. Whilst there is a large school population in that section of the city the attendance at these schools is decreasing because parents are unwilling to endanger the health of their children by confinement in the class-rooms in these buildings.

We again urgently recommend that a lot be leased or purchased in that school district, and a new house be erected for these schools during this year.

PRIMARY SCHOOLS No. 4.

Two lots adjoining the present house at corner of Hanover and Lee streets, occupied by these schools, have been purchased by the city, by which the site is much enlarged, and it is now recommended that a liberal appropriation, of not less than $30,000, be made for the erection of a new building. It is a desirable location for these schools, and there ought to be no delay in furnishing improved accommodations for the teachers and pupils.

PRIMARY SCHOOLS No. 36 AND No. 37.

These schools are located in the eastern part of the city, the former being on South Collington avenue, opposite to Patterson Park, and the latter at the corner of North Collington avenue and Hoffman street, and both are occupying rented dwellings. The number of pupils is rapidly increasing in both schools, and suitable houses should be erected for their use at an early date.

PRIMARY SCHOOL IN SOUTHWESTERN DISTRICT.

Primary Schools No. 12 and No. 22 are so crowded that it has become necessary to accommodate several

classes in rented buildings. It is recommended that a new house be erected in the southwestern district for the relief of these schools and for the use of the increasing school population in that neighborhood.

PRIMARY SCHOOLS IN THE SOUTHERN AND WESTERN DISTRICTS.

The house occupied by Primary School No. 33 is on the corner of Light and Clement streets, and contains twelve class-rooms, and was erected in 1890. There are now 950 pupils in these schools and twenty-one teachers, occupying twelve class-rooms, and, of course, the work of the schools is done under disadvantageous circumstances.

The primary schools in the western district are also crowded, and it is recommended that a new house be erected in each of these districts.

ENGLISH-GERMAN SCHOOL No. 3.

There are over 1,500 pupils in this school who occupy the school-house on east Baltimore street, erected in 1879, and other buildings rented for their use. The large dwelling adjoining the school house is now rented for $600 per annum, and it can be purchased for a sum in fee which will reduce the rent. The probability is that the school will continue to increase, and it is desirable to purchase the adjoining property for the permanent use of this school, and we recommend an appropriation for this purpose.

COLORED SCHOOL No. 9.

This colored school, on North Carrollton avenue, is now crowded, and it has been necessary to rent another building for its use. There are over 1,000 pupils in the school, and the present school house contains only twelve class-rooms, which are insufficient to accomodate this number. It is an illustration of the improvidence of erecting a small house for the use of a large school.

It has been suggested that another lot be purchased and a larger house be erected for this school in that section of the city, and that the present house be renovated and used for a white primary school that is needed in that neighborhood, and an appropriation is asked for this purpose.

CONDITION OF THE SCHOOLS.

It is very gratifying to be able to report from year to year that the public schools of our city are increasing in number and efficiency and that their condition is satisfactory.

The reports of the Superintendent and Assistant Superintendent show the results of their daily visits to the schools and contain valuable suggestions for their improvement, which are entitled to our earnest consideration. They find that the teachers are generally performing their work with fidelity and zeal,

and that the pupils are prompt in attendance, and there is evidence of progress and improvement in every department.

The general discipline in the schools is improving, and most of the teachers are able to control their pupils without resorting to corporal punishment. By the existing rules this punishment can only be inflicted by the principal after due investigation, and a bi-weekly report is made to the Board of all cases of punishment. The summarized reports show that during the past year one hundred and thirty schools were controlled without a single case of corporal punishment, whilst a few of the schools report the necessity for this kind of discipline. If such a large number of the schools were conducted satisfactorily without corporal punishment, it seems possible that all might be able to do so, and it is hoped that in future reports we may be able to announce that this mode of punishment in our schools has been abolished.

Our system of education is liberal and well adapted to the wants of those for whom it was intended. It may not have been the purpose of the founders of our system to ingraft on it collegiate instruction or manual training, but public sentiment demanded higher education than was given in the lower grades, and those in charge of the schools were justified in responding favorably to this demand. Many of our

best citizens have received all their education in our public schools, and they cordially sustain us in our efforts to make them furnish all the instruction that is necessary for the business purposes of life.

We realize that our school work is sometimes imperfectly performed, and that our system of instruction may be improved. Each succeeding year reveals some errors in the past. There must necessarily be educational experiments so long as such differences of opinions prevail among educators as to the proper mode of securing the best results. Our object has been to remove existing errors as rapidly as circumstances will permit. For this purpose we have cordially solicited the advice and assistance of the friends of public education, and have often been benefited by their judicious counsel. But, whilst thus aided by friends, our system and its management have sometimes been unjustly criticised by enemies, who would gladly obstruct the work of the schools. They object to the liberal and advanced instruction given in the schools and to the increasing cost of maintaining them. It is gratifying to know that these querulous objectors receive but little sympathy from our community, and that their wanton assaults on our public school system have been promptly and severely repelled by the intelligent and influential portion of the press of our city, and we thankfully acknowledge its valuable assistance in promoting and protecting this important interest.

EVENING SCHOOLS.

There is necessarily a large number of young persons in our city who are unable to attend our schools because they are compelled to work during the day for their living. For the purpose of furnishing instruction to this class of persons, eight evening schools were opened in 1892, under the charge of thirty-eight teachers, with one thousand four hundred and thirteen pupils on roll at the end of the year. This was a large increase in attendance over preceding years, and showed an appreciation of the schools by those for whom they were intended.

During the past year many former pupils of these schools requested that they again be opened, and in response to this request the Board organized a regular system of evening schools, under the charge of a standing committee, to be opened the first Monday in October and closed the last Friday in April. In accordance with this rule, ten evening schools have been conducted under the charge of thirty-two teachers, with one thousand two hundred and two pupils in attendance.

In addition to these young pupils, a number of adult foreigners have been attending these schools for the purpose of learning the English language.

The cost of these schools, which were open about three and a half months during the past year, was

$5,256.95, and as they will be open about seven months during this year, the Board has asked an appropriation of $10,000 for their current expenses.

TEACHERS' SEMINARY.

In the last annual report the Board asked authority to establish a seminary or training school for the purpose of instructing graduates of our high schools and others who desire to become teachers in our schools in the art and science of teaching. The subject was referred to the Committee on Education for its consideration, but no report was ever made to the City Council.

The Board has again considered the subject, and deeming it to be one of importance to the schools, it has requested your favorable consideration of the application. Without reflecting in any manner on the teachers in our schools, and whilst recognizing the good work they are doing, we still believe that even better results could be obtained if many of them had received practical training in the best methods of teaching before commencing their work.

The great value and importance of professional training are recognized by all experienced educators, and normal schools have generally been established as a part of all systems of public education. Graduates of high schools, or successful applicants who have

passed an examination, may possess the intellectual qualifications for teaching, but they are generally incompetent to teach, because they are inexperienced and do not know how to properly impart their knowledge. It is not right that these inexperienced teachers shall thus experiment on their pupils, but they should be thoroughly trained for their work before they are appointed in the schools. In the past history of our schools it was a recognized fact that the best teachers were those who had previously attended the normal classes, and some of them, who were ambitious to excel, continued their connection with these classes even after they became teachers. If such good results followed the limited instruction given in these weekly classes, how much better it would be if a daily training school were organized and liberally sustained, which all candidates should be required to attend before their appointment.

As the proposed school will not require the erection of a new building for its exclusive use, and the current expenses will not be large, it is hoped that the desired authority will be given to the Board, and that the school may be established during this year.

SEWING.

Instruction in sewing was introduced in the schools in 1892, and is now given to all the girls in the grammar grades and third primary grade by fifteen special

teachers. Objection was made to its introduction by some persons who thought that it would interfere with the regular studies in the schools, but experience has shown that this opinion was unfounded. The reports from the teachers prove that it has really increased the interest and attendance of the pupils, and generally improved their work.

Manual instruction to the boys in the schools has been successfully tried and has not interfered with their literary studies, but, on the contrary, has produced most satisfactory results. The committee in charge of this subject, after careful consideration, and an examination of similar work in the public schools of other cities, unanimously reported in favor of instruction in sewing in our schools, and said that "wherever the experiment had been tried under proper conditions it had been found that better results *in all the work of the schools* had been secured after manual instruction had been introduced. Parents and children become more interested in the school, the scholars attend with more regularity, and the increased earnestness of the pupils at the reality of the work greatly promote the efficiency of the schools in every direction."

There are now 13,657 girls receiving this instruction with most satisfactory results, and we are satisfied that there are very few persons in our community who now would be willing to have sewing removed from our schools.

COOKERY.

During the early part of last year a committee of ladies, who are deeply interested in the work of our public schools, proposed to the Board that they would establish a school and defray all the expenses for the purpose of giving free instruction in cookery to one hundred pupils of the female grammar schools. Their proposition was carefully considered, and, as each pupil would be required to attend this school only one hour each week, it was decided to grant the generous application of these ladies. The cooking school was, therefore, opened in November last, and one hundred and twenty girls of the seventh and eighth grades of Female Grammar Schools No. 4 and No. 10, with the consent of their parents, were authorized to attend the school.

The school is under the charge of Miss Grace E. McCullough, who is thoroughly qualified to give this instruction, and her report to the Superintendent shows that the girls have been prompt in their attendance, and their conduct and work have been very satisfactory. The pupils are mostly between twelve and fourteen years of age, and, though so young, they have been taught within the short time since the school has been opened, to prepare almost every kind of ordinary food that is used in families, and the parents of most of them have earnestly commended this new work and urge its general introduction in the schools.

The object of these ladies is to illustrate the great value of this kind of instruction to the girls in our schools, with the hope that, if their effort is successful and is approved by the community, the city may be induced to authorize the Board to establish other cooking schools in connection with our public school system.

This subject will be fully examined during this year, when the results are ascertained at the close of the term, and if favorably considered by the Board application will be made for authority to establish other schools of this kind.

PUBLIC SCHOOL LIBRARY.

We report from year to year the growth and condition of this library because we deem it to be a valuable assistant to the teachers in their work. There can be no doubt about the value and importance of a free public library of good books for the use of teachers and pupils in public and private schools, and liberal appropriations have been made for the formation and support of such libraries in all large cities. For this reason the city authorized the Commissioners to establish free libraries in Baltimore City College and the female high schools, and when the new building for the college was erected in 1874 a part of it was appropriated for a public school library for the use of the teachers and pupils of our schools.

The Board has shown its appreciation of the library by making an annual appropriation of $500 for the purchase of new books, and regrets that it cannot appropriate a larger amount for this purpose.

The report of the librarian shows that there are 7,320 volumes in the library, being an increase of 595 during the past year. The number of registered readers was 1,465, being an increase of 210 over the preceding year, and the number of books taken out during the year was 5,291. The librarian is devoted to his work and is satisfactorily performing the duties of his office. Although the library is small, it embraces every department of useful reading, showing that the books have been selected with good judgment.

We cordially commend the library to all our teachers, and hope they may be benefited by freely using it in their school work.

WORLD'S COLUMBIAN EXPOSITION.

At the request of the Board, and under the direction of the superintendents and teachers, the pupils of the schools prepared an exhibit of the work of all the grades, which was sent to the Exposition. The exhibit consisted of fifty-six volumes of written specimens of work in all branches of study in the schools, from the primary department to the high schools, of which nineteen contained the work of the high schools and college; twenty, the work of the grammar

schools; thirteen, that of the primary schools; and four, that of the pupils of the English-German schools.

Whilst the exhibit was not as large or as elaborately prepared as those of some other public schools, and probably did not attract as much attention from visitors, yet the work of the pupils compared most favorably with any other on exhibition, and received honorable mention and complimentary certificates from the Jury on Awards. The exhibit of the Baltimore Polytechnic Institute was eminently successful, and received special notice and attention. It consisted of two engines, built by students of the Institute, and many other specimens of their manual and literary work, and the entire exhibit was highly commended by the Committee on Examinations of this department of the Exposition. The Institute has been officially notified of the following awards: 1st,General Merit; 2d, Mechanical Drawing; 3d, Freehand Drawing. After the Exposition was closed, application was made for this exhibit to be placed in the Chicago Museum, and also by the Superintendent of Public Schools of Philadelphia for its transfer to the Museum of Pedagogy of that city, and by the United States Commissioner of Education that it be given to Washington city, D. C. These requests showed that the exhibit was highly appreciated by distinguished educators, a number of whom afterwards visited the Institute and examined its methods of instruction.

The Colored Manual Training School was opened in September, 1892, and the principal reports that the pupils are earnest and diligent in their work, and the results are very satisfactory. An exhibit was prepared by the pupils, illustrating the work of the school in its various departments, and sent to the Exposition. It attracted special attention as the manual training work of colored pupils, and the school received, from the Board of Awards, a medal for hand-work.

The Superintendent of Instruction believes that this general exhibit of our school work exercised a beneficial influence on our teachers and pupils, and recommends an annual exhibit in our city.

IN MEMORIAM.

On the last day of the year, death again invaded our Board and removed from our midst Edward A. Burke, Commissioner for the Fourth Ward. Mr. Burke had been a member of the Board for several years, and was prompt and faithful in the performance of his official duties. He was genial and agreeable in his personal and official relations with those with whom he was associated, and was esteemed by his colleagues of the Board, and by the teachers in the schools. Appropriate resolutions were adopted

by the Board expressive of its appreciation of the character and services of the deceased.

It is again our sad duty to announce the death of several of our most experienced and successful teachers, who have passed away during the year. Some of them had been connected with the schools for many years, and had faithfully and conscientiously performed their work, and won the respect and affection of their pupils. We sincerely appreciate their devotion to duty in life, and will remember them as valuable associates in the cause of public education.

WILLIAM N. BURGESS,

First Assistant, Male Grammar School No. 7, Died February 13, 1893.

MAGGIE DRUMMOND,

Assistant, Male Primary School No. 18, Died March 9, 1893.

JAMES T. JOHNSTON,

Assistant, Male Colored School No. 9, Died March 20, 1893.

MATILDA LAUER,

Assistant, Male Primary School No. 28, Died July 23, 1893.

CLARA J. MACOMBER,

Assistant, Female Primary School No. 1, Died August 27, 1893.

JULIA A. BURFORD,

Assistant, Male Colored School No. 6, Died September 10, 1893.

ANNIE E. BOWMAN,

Assistant, Female Primary School No. 28, Died December 4, 1893.

ELIZA J. DAVIS,

Teacher of Drawing, Western Female High School, Died December 25, 1893.

MATILDA L. HISKY,

Principal, Male Primary School No. 15, Died December 27, 1893.

We have thus briefly reported the work and condition of the schools during the past year, and now commend them to your official consideration and care.

Some changes have been made, which we hope will result for the benefit of the schools. We cling to old methods which have stood the test of years, but will adopt the new when satisfied that a change will be beneficial.

The city has shown its appreciation of the value of free education by the adoption and liberal support of a system of instruction which has obtained public favor. The class opposition which once existed against it has nearly disappeared, and public schools

are no longer classified with public charities. Their continuing prosperity and success will depend largely upon those who may be chosen to manage and control this important interest. They are now free from sectarian or political control,and should continue to be so in the future. It matters not what may be a man's political sentiments or religious views in private life, when he accepts the office of Commissioner of Public Schools, it is his duty to divest himself of all political and religious prejudices in this new relation, and to act only for the best interest of the children, and the success of the schools committed to his charge. It is hoped that those who succeed us in this office of trust will adopt this course of action for the government of our schools.

JOHN T. MORRIS,

President.

IN MEMORIAM.

EDWARD A. BURKE.

Extract from the minutes of the Board, January 2, 1894:

"Mr. Wentz announced the death (on December 31, 1893), of Mr. Edward A. Burke, Commissioner for the Fourth Ward, and submitted the following resolutions, which were adopted:

"RESOLVED, 1st. That this Board notes, with feelings of sincere grief, the death of their colleague, Edward A. Burke, member from the Fourth Ward.

"RESOLVED, 2d. That in the performance of his duties as Commissioner he was conscientious and careful, attentive and reliable, and as a friend, warm and devoted.

"RESOLVED, 3d. That in his years of service he endeared himself to the teachers and to the members and officers of this Board, and gained the approbation of his constituents.

"RESOLVED, 4th. That these resolutions be entered upon the minutes of this Board."

Attest:

HENRY M. COWLES,
Secretary.

ANNUAL REPORT

— OF THE —

Committee on Accounts.

BALTIMORE, December 31st, 1893.

TO THE BOARD:

Your Committee on Accounts respectfully report that in compliance with the requirements of the rules of the Board prescribing its duties, it has examined and audited bills during the past year amounting to $183,-091.86, which, with $870,584.45, amount of pay-rolls signed by the President and Secretary, as required by city ordinance, gives $1,053,676.31 the total amount of the current expenses of the schools for the year.

In addition to the above, the committee has audited bills amounting to $4,726.73 on account of the World's Fair, which amount is not counted as part of the *current* expenses of the schools.

This shows the total amount expended by the Board for current expenses and World's Fair to be $1,058,403.04.

Your Committee has also examined the accounts of the Secretary, as required by the rules of the Board, and found them correct.

We find that he has received from non-resident pupils the sum of $3,456.50, all of which has been paid over by him to the City Register, as required by city ordinance, and shown by receipts of said officer.

Having carefully examined the expenditures for the several items, and considered the circumstances which will operate to increase the amounts in the coming year, and to what amount the increase will probably extend, we respectfully submit the following:

ESTIMATES FOR THE YEAR 1894.

For all schools of all grades in first twenty wards	$1,012,515 00
For all schools of all grades in Twenty-first and Twenty-second Wards	138,300 00
Total	$1,150,815 00

The great convenience and benefit of having the appropriation for all the several items made as a whole, as given above, has been so apparent, not only in this department, but also in those of the Comptroller and Register, that we trust the same will be continued in the future.

However, for the benefit of any who may desire more definite information as to the purposes for which the money is to be expended, we give the estimate itemized as follows:

FOR FIRST TWENTY WARDS.

For salaries		$800,500 00
For rents		8,000 00
For books and stationery		52,000 00
For heating apparatus		14,000 00
For furniture		25,700 00
For fuel		33,000 00
For repairs and cleaning		14,000 00
For incidentals		15,000 00
For night schools		10,000 00
For salaries—annex schools	$110,000 00	
For other items—annex schools	28,300 00	
		$138,300 00
For Polytechnic Institute		30,910 00
For Colored Manual Training School		9,405 00
		$1,150,815 00

As the population of the city increases, and additional school facilities are required, the expenditure for school purposes must necessarily increase from year to year.

The increase is not caused by any increase in salaries in the several grades, nor by any increase in the prices paid for articles required; for, on the contrary, the schedule of salaries, with a few slight exceptions, is the same now that it was twenty-five years ago, and the prices now paid for fuel, furniture and books, which are the items of largest expenditure, are much less now than they were at that time. For example, school desks

for which the Board at that time paid eight or nine dollars each, are now obtained, of the same pattern, for less than one half that amount. In view of these facts we think the increase of expenditures for public school purposes is a subject for congratulation rather than otherwise, as it is evidently an index of the growth of our city or of the ever-increasing popularity of our public schools, if not of both.

We give below some of the reasons for fixing the estimates at the amounts as hereinbefore given.

SALARIES.

As the schedule of salaries is not changed from year to year, the amount required will depend upon the number of additional teachers, which must be determined by the increase of pupils. It is impossible therefore to estimate this item with precision. The application of the rule which has been applied in past years, and which seldom varies much from the actual amount required, gives the amount already stated, viz., $800,500.

RENTS.

The amount expended for rent during the past year is $7,082. This amount must be increased.

An additional house will have to be rented for the use of a portion of Primary School No. 36, which is now in a rented building and overcrowded.

If No. 4 Primary is to be rebuilt, two or more houses will have to be rented for the school during the rebuilding. Other schools may, and probably will, require additional accommodations, and in view of the certain increase we have fixed the amount for this item at $8,000. It is unfortunate that the Board is compelled to rent dwelling houses for school purposes. They are always unfit for the purpose. They require a considerable expenditure to make them reasonably comfortable, and much more to put them in order when vacated. Still the Board has twenty-four buildings now rented for school purposes.

BOOKS AND STATIONERY.

The amount expended on account of this item during the past year was $47,772.84. To any one who only looks at the amount without making any calculations, or even having any idea of the number of children to be supplied with books, the amount may seem large; but if we make the calculation, taking the number on roll, 57,048, we find the average *per capita* cost for books is only 97 cents for the year for all grades from the beginners' class up through Baltimore City College. The wonder is rather how they can get along with so little. It is only by a liberal use of mucilage and brush, patching and mending, and often requiring two or more pupils to use one book.

We have fixed our estimate for this item at $52,000.

FURNITURE.

The amount expended for furniture during the past year was $27,830. Some articles that will come under this head were needed in the past year, but not obtained, and are included in the estimate; but as there may not be as much need for new furniture, we have reduced the estimate more than $2,000 and fixed it at $25,700.

FUEL.

The amount expended on account of this item in the past year was $28,820. Of course the opening of new schools, the additional rented buildings, and using, in some cases, additional rooms in old buildings, all require an additional quantity of fuel. Again the uncertainty as to the price we may have to pay for coal, arising from possible miners' strikes, etc., and the fact that an increase of even fifty cents per ton would add $2,500 to the otherwise total cost, leads your committee to fix the estimate for this item at $33,000.

HEATING APPARATUS, REPAIRS AND CLEANING.

The estimates for these items were first made by the person having charge of the matters chargeable to these items, and after careful investigation and revision by this Committee we have fixed the amounts as follows: .

For heating apparatus and its repairs.... .....$14,000
For repairs and cleaning.... 14,000

INCIDENTALS.

This item includes all charges which do not properly belong to any of the other items, such as printing the annual report and all other printing, advertising, blank reports for the schools, office supplies, janitrices' supplies, expenses of commencements, building coal bins, etc. The amount expended for this item during the past year was $13,809, and we have fixed the amount for the coming year at $15,000.

POLYTECHNIC INSTITUTE AND COLORED MANUAL TRAINING SCHOOL.

The estimates for these institutions were made by their respective principals, who know much better than any one else what will be needed by them, and were submitted to their committee and approved by the same.

Their estimates are as follows:

For the Polytechnic Institute..... $30,910
For the Colored Manual Training School..... 9,405

NIGHT SCHOOLS.

These schools were open during the past year only about three and a half months, and their cost for that time was $5,256.95. The Board having organized a regular system of night schools, and ordered that hereafter they shall open on the first Monday in October

and close on the last Friday in April, they will therefore be open during 1894 nearly seven months. For this item we have fixed the amount at $10,000.

ANNEX SCHOOLS.

The amount paid for salaries in these schools in 1893 was $95,883.25, which is more than $12,000 in excess of that of 1892. The same rate of increase in 1894 over 1893 would require $108,000. But the increase will be much greater in 1894 because of the large increase in pupils and teachers in the fall of 1893, which will be felt much more in 1894, and for these reasons we are convinced that it will not be safe to estimate for less than $110,000, and we have fixed it at that amount.

The same reasons that will cause an increase in the salary account of these schools will produce a similar effect upon the other items, and we have added to the expenditure of the past year for these items the moderate sum of $4,184, making the estimate for the coming year $28,300.

With such an ever-varying basis for calculation as is the number of pupils in the schools, it is of course impossible to make an exact estimate. This report is made, however, after much thought and careful consideration, and we trust it will be so considered by those whose

duty it is to provide the means for conducting the system.

Respectfully submitted,

JAMES L. MURRILL,
CHARLES J. WIENER,
W. H. B. FUSSELBAUGH, of J.,
JOSEPH P. McGONIGLE,
} *Committee.*

The other member of the Committee (Edward A. Burke) died December 31, 1893.

SECRETARY'S STATEMENT

OF

ESTIMATES, EXPENDITURES, &c. ON ACCOUNT OF PUBLIC SCHOOLS IN 1893.

The estimates made by the Board for the current expenditures for school purposes for the year 1893 were as follows:

For salaries, not including the Manual Training nor the Colored Manual Training Schools, in first 20 wards	$750,000 00
For items other than salaries in first 20 wards	150,000 00
For Manual Training School	26,110 00
" Colored Manual Training School	10,571 00
" Salaries in the Annex Schools	96,000 00
" other items	21,000 00
Total	$1,053,681 00

In making the appropriation the Mayor and City Council reduced the amount estimated to the extent of $15,000, all of which was taken from the "items other than salaries in the first 20 wards."

They, however, appropriated that amount in the fall, giving $12,000 of it to the item of the first 20 wards from which it had been taken, and (at the request of this Board) $3,000 to the corresponding item of the Annex account, and it is so placed in the following statement.

During the year the name of the Manual Training School was changed by the Board to the Polytechnic Institute and it will be so designated in the future.

Appropriations and expenditures on account of each of the items before mentioned:

Appropriated for salaries—first 20 wards..	$750,000 00
Expended " " " ..	753,730 95
Overdrawn	$3,730 95

Appropriated for other than salaries—first 20 wards	$147,000 00
Expended for other than salaries—first 20 wards	147,476 59
Overdrawn	$476 59

Appropriated for Manual Training—for white pupils	$26,110 00
Expended for Manual Training—for white pupils	25,015 89
Balance	$1,094 11

Appropriated for Manual Training—for colored pupils	$10,571 00
Expended for Manual Training—for colored pupils	7,453 20
Balance	$3,117 80

Appropriated for salaries for annex schools.	$96,000 00
Expended " " "	95,883 25
Balance	$116 75

Appropriated for other than salaries in annex schools	$24,000 00
Expended for other than salaries in annex schools	24,116 43
Overdrawn	$116 43

Total appropriations for all schools in the first 20 wards	$933,681 00
Total expenditures for all schools in the first 20 wards	933,676 63
Balance	$4 37

Total appropriation for the schools in the annex	$120,000 00
Total expenditures for the schools in the annex	119,999 68
Balance	32

Total amount appropriated for all the schools	$1,053,681 00
Total amount expended for all the schools.	1,053,676 31
Balance	$4 69

WORLD'S FAIR ACCOUNT.

Amount appropriated in 1892..	$5,000 00	
" expended in 1892.....	140 00	
" unexpended and reappropriated for 1893		$4,860 00
" expended in 1893		4,726 73
Unexpended balance		$133 27

EXPENDITURES ITEMIZED.

The term "General Account" in the following table includes all the schools in the first twenty wards not otherwise specially mentioned.

Items.	White Schools.	Colored Schools.	Totals.
Salaries.....Gen. Acc.	$651,267 45	$98,235 50	$749,502 95
Rents ..... "	4,698 17	2,384 66	7,082 83
Books and Stationery..... "	42,442 22	4,913 77	47,355 99
Heating Apparatus..... "	8,002 50	2,543 34	10,545 84
Furniture ..... "	21,940 46	5,879 85	27,820 31
Fuel ..... "	25,480 20	3,339 88	28,820 08
Repairs and Cleaning..... "	10,195 31	1,419 64	11,614 95
Incidentals, Printing, &c.. "	12,398 30	809 34	13,207 64
Polytechnic Institute.....	25,015 89	.....	25,015 89
Colored Manual Training School.....	.....	7,453 20	7,453 20
Annex Schools—salaries.....	90,850 45	5,032 80	95,883 25
" " other items.....	23,115 66	1,000 77	24,116 43
Night Schools.....	4,632 33	624 62	5,256 95
	$920,038 94	$133,637 37	$1,053,676 31

EXPENDED BY THE INSPECTOR OF BUILDINGS ON ACCOUNT OF NEW BUILDINGS AND IMPROVEMENTS AND REPAIRS OF OLD BUILDINGS.

In the First Twenty Wards.

On account of No. 3, colored, new	$ 9,786 09
On account of Eng. Ger. No. 1, new	2,832 67
Painting sundry schools	4,000 00
Wood and iron ceilings	2,033 20
Sanitary and other improvements	6,857 52
General repairs	15,000 00
	$40,509 48

In the Twenty-first and Twenty-second Wards.

On acct. of Annex No. 8, new	$13,785 50	
On acct. of Annex No. 9, new	6,110 66	
For Smead system, No. 8	3,344 00	
On account of Annex No. 15	607 23	
For general repairs	3,000 00	
		$26,847 39
Total by Inspector		$67,356 87

TOTAL EXPENDITURES FOR SCHOOL PURPOSES.

Expended by the Board	$1,053,676 31
Expended by Inspector of Buildings	67,356 87
Total	$1,121,033 18
On account of World's Fair	4,726 73

RECEIPTS FOR THE CURRENT EXPENSES OF THE BOARD.

From the City Collector, taxes	$ 793,658 49
From the State Treasurer, taxes	213,941 58
From non-resident pupils	3,456 50
From John F. Plummer	114 50
From all other sources	42,505 24
	$1,053,676 31

NON-RESIDENT PUPILS.

The number of non-resident pupils now in the schools is 143. The total number in the schools during some portion of the year, 216, being sixteen less than in 1892.

The amount received from non-residents. $3,456 50

From Polytechnic Institute	$970 75	
" Baltimore City College	835 00	
" female high schools	249 00	
" male grammar schools	562 75	
" female grammar schools	452 75	
" male primary schools	75 00	
" female primary schools	57 00	
" English-German schools	28 00	
" annex schools	226 25	$3,456 50

The fees for non-residents are as follows:

In Baltimore City College	$50	per annum,	(payable quarterly.)
" Polytechnic Institute	50	"	"
" female high schools	32	"	"
" all grammar grades	16	"	"
" " primary "	12	"	"

The fees are payable in advance. Quarters commence: First quarter, September 1st; second quarter, November 21st; third quarter, February 11th; fourth quarter, April 26th.

The average salary of teachers in 1893 was $572.29.

PER CAPITA COST.

The cost per pupil, including all the day schools under the control of this Board, based

1st. On the enrollment and the expenditure for books.

2d. On the enrollment and the total current expenses including books, was as follows:

	For Books.	For Current Expenses.
In Baltimore City College	$3 00	$67 86
" Female High Schools	2 12	30 67
" Male Grammar Schools	1 68	22 30
" Female Grammar Schools	1 43	17 88
" English German Schools	1 03	16 44
" Male Primary Schools	58	14 58
" Female Primary Schools	54	14 68
" Polytechnic Institute	2 21	51 47
" Colored Manual Training	2 27	85 67
" Colored High and Grammar Schools	1 46	19 76
" Colored Primary Schools	52	15 24
" Annex Schools	91	16 78
Average for all	96.6	18 55

STATE TAX.

Amount of school tax paid by the city to the State	$269,311 81
Amount of school tax received by the city from the State	204,360 11
Excess to the State	$64,951 70

SCHOOL BUILDINGS.

Number of school buildings owned by the city	88
Number rented for school purposes	24
Total number used for school purposes	112

The following tables exhibit the monthly expenditure; the itemized expenditure for each school; the location of each building; size of lot and of building, &c. The schedule of salaries is also reported, as usual.

HENRY M. COWLES,
Secretary.

TABLE A.

Showing the Amounts Expended during each Month of the Year 1893.

Months.	Salaries.	Repairs and Cleaning.	Books and Stationery.	Rents.	Heating Apparatus and its Repairs.	Furniture.	Fuel.	Incidentals, Printing, etc.	Polytechnic Institute.	Colored Manual Training.	Annex Schools.	World's Fair Exhibit.	Totals.
January....	63,236 90	235 57	.....	983 50	755 07	6,172 43	.....	1,071 52	1,535 38	365 00	8,124 50	.....	82,479 87
February..	63,292 25	334 47	11,581 42	319 00	583 98	5,338 42	404 64	783 07	2,078 83	365 00	10,144 08	430 50	95,655 66
March.....	63,020 80	1,070 89	2,957 98	370 00	1,907 17	1,036 91	1,139 17	792 71	1,900 32	466 88	8,695 67	488 63	83,847 13
April.....	62,244 50	219 53	1,104 92	1,098 50	41 00	552 97	1,716 51	1,492 25	2,177 41	566 27	8,428 53	1,931 39	81,573 78
May	62,130 10	286 22	901 88	319 00	71 80	2,645 25	1,718 69	923 11	2,680 58	543 05	9,021 52	491 50	81,732 70
June.....	122,937 65	382 92	460 93	370 00	1,793 42	187 10	57 92	1,423 23	3,258 18	921 80	15,738 89	366 25	147,898 29
July.....	.....	1,329 62	48 14	1,098 50	1,576 62	4,570 16	23,439 10	1,520 61	548 42	26 07	8,497 14	95 60	42,749 98
August.....	61,006 90	2,275 97	.....	539 00	833 96	304 70	.....	847 92	1,322 00	365 00	8,932 21	18 40	76,446 06
September.	62,015 30	2,650 00	11,116 99	370 00	1,098 74	4,912 91	.....	1,157 90	1,670 81	515 51	10,291 71	329 03	96,128 90
October....	63,701 15	434 82	8,493 78	857 16	850 10	9 00	.....	1,799 41	2,376 76	844 37	11,192 41	238 75	90,797 71
November.	64,616 25	1,006 68	9,838 46	508 17	938 98	497 48	194 30	1,030 17	2,343 90	1,123 96	11,092 09	15 00	93,205 44
December.	65,529 15	1,388 26	1,268 34	250 00	95 00	1,603 20	149 75	967 62	3,123 30	1,350 29	9,840 93	321 68	85,887 52
Totals...	753,730 95	11,614 95	47,772 84	7,082 83	10,545 84	27,830 53	28,820 08	13,809 52	25,015 89	7,453 20	119,999 68	4,726 73	1,058,403 04

TABLE B.

Showing the Itemized Expenditures for Each School.

Schools.	Salaries.	Repairs and Cleaning.	Books and Stationery.	Rents.	Heating Apparatus and its Repairs.	Furniture.	Fuel.	Incidentals, Printing, etc.	Totals.
General Expense & Library.	$26,530 00	$1,169 20	$ 465 34	$300 00	$ 56 29	$2,517 98	$ 56 13	$6,634 77	$37,729 71
Baltimore City College	31,760 00	291 57	1,617 34		58 75	758 44	495 67	1,594 44	36,576 21
Eastern Female High School	13,292 50	110 33	1,241 69		123 69	241 00	411 41	316 37	15,736 99
Western " "	13,533 00	58 60	824 94		122 80		474 87	186 81	15,201 02
Balto. Polytechnic Institute.	16,518 50	716 67	1,074 21		385 94	287 60	875 19	5,157 78	25,015 89
Col'd Manual Training Sch'l	4,451 75	35 00	197 27		35 20	67 00	110 22	2,556 76	7,453 20
Male Grammar No. 1	$5,374 00	$354 55	$ 582 85		$ 76 34	$2,016 00	$282 54	$106 25	$8,792 53
" " 2	7,211 25	303 13	617 16		5 00		267 68		8,404 22
" " 3	4,188 00	44 45	164 38		41 80		133 87		4,572 50
" " 4	4,600 00	36 65	448 75		84 51	40 88	126 60		5,337 39
" " 5	4,372 00	263 87	345 78		126 47	8 00	128 84	26 00	5,270 96
" " 6	7,398 00	110 97	684 81	$90 00	78 05	44 50	322 82	3 50	8,732 65
" " 7	5,084 75	85 52	436 34		80 36		195 72		5,882 69
" " 8	6,438 00	124 63	560 31		326 78	23 00	265 20	6 00	7,743 92
Male Gram. and Prim. No. 9	3,805 50	178 78	139 68	585 00	29 55		57 62	171 49	4,967 62
Male Grammar No. 10	5,637 75	102 72	478 11		72 50	102 07	95 80		6,488 95
" " 11	5,244 75	82 86	434 10		186 35	370 92	261 56	62 25	6,642 79
" " 12	5,746 50	63 89	538 81		90 19	47 25	229 35	8 75	6,724 74
" " 13	3,876 75	69 91	250 47		52 50	15 00	95 38	14 50	4,374 51
" " 15	8,432 00	74 17	738 07		107 75	80 52	357 49	3 00	9,793 00
" " 16	5,510 30	54 82	361 84		33 00	40 88	271 18	3 00	6,275 02
" " 17	5,054 70	145 37	367 75		75 51	15 00	162 67	6 00	5,827 00
" " 18	4,222 25	102 20	347 14		67 85	2,794 62	233 75	307 53	8,075 34

Male Grammar No. 19	6,661 00	18 35	655 02			15 00	129 30	14 00	7,492 67
" " 20	7,482 00	68 25	693 87		5 00		411 46	48 16	8,708 74
" " 21	6,988 50	57 96	768 19		93 00	12 80	217 57	5 00	8,143 02
*Male & Fem. Gram. No. 22	1,358 50	253 76	1,044 98			649 35	297 86		3,604 45
Totals, Male Grammar	$114,686 50	$2,596 81	$10,658 41	$675 00	$1,632 51	$6,275 79	$4,544 26	$785 43	$141,854 71
English-German No. 1	$ 9,742 00	$128 05	$ 624 99		$108 03	$1,000 00	$322 25	$256 24	$12,181 56
" " 2	15,761 85	132 04	1,073 77		129 00	64 50	587 41	81 19	17,829 76
" " 3	19,287 50	276 39	1,341 61	$600 00	157 95	56 63	522 00	37 99	22,280 07
" " 4	18,147 35	75 65	1,246 38		92 00	165 58	649 22	308 36	20,684 54
" " 5	13,994 45	330 24	1,345 67	704 17	98 98	5 75	811 50	64 13	17,354 89
Totals, English-German	$76,933 15	$942 37	$5,632 42	$1,304 17	$585 96	$1,292 46	$2,892 38	$747 91	$90,330 82
Female Grammar No. 1	$ 5,648 00	$ 67 43	$ 388 70		$ 60 80		$290 74	$ 22 60	$ 6,478 27
" " 2	5,654 30	70 68	864 82				286 70	45 84	6,922 34
" " 3	3,175 25	23 00	207 93		29 00	$ 31 68	143 75	22 45	3,633 06
" " 4	3,678 00	28 00	340 70		61 69	18 00	151 67	19 47	4,297 53
" " 5	4,162 50	194 15	408 22		96 15	10 00	167 76	22 88	5,061 66
" " 6	6,633 25	90 33	791 48	$270 00	68 00	117 68	305 44	29 18	8,300 36
" " 7	4,931 00	33 69	435 63		36 00		210 38	24 64	5,671 34
" " 8	6,342 25	340 22	598 08		345 03	33 97	355 12	27 26	8,041 93
Fem. Gram. and Prim. No. 9	3,169 50	42 09	155 26	600 00	41 27		87 85	13 72	4,109 69
Female Grammar No. 10	5,187 35	179 55	537 40		67 63	195 26	140 44	30 99	6,338 62
" " 11	5,209 00	75 71	490 93		161 23	61 32	296 63	30 36	6,325 18
" " 12	4,287 75	56 05	366 52		128 01	70 57	287 62	56 79	5,253 31
" " 13	3,664 00	59 79	359 67		52 50		114 76	28 63	4,279 35
" " 15	8,770 05	97 05	891 21		63 37		360 62	44 63	10,226 93
" " 16	4,854 55	59 71	349 95		45 10	60 00	255 44	18 02	5,642 77
" " 17	4,149 75	158 92	372 15		63 77		195 15	24 39	4,964 13
" " 18	3,805 00	27 00	421 21		85 00	2,642 96	278 32	229 83	7,489 32
" " 19	5,163 50		668 77			87 00	144 92	17 93	6,082 12

* Opened September, 1893.

TABLE B—Continued.

Schools.	Salaries.	Repairs and Cleaning.	Books and Stationery.	Rents.	Heating Apparatus and its Repairs.	Furniture.	Fuel.	Incidentals, Printing, etc.	Totals.
Female Grammar No. 20	7,415 50	47 10	780 88				408 61	45 39	8,697 48
" " 21	7,094 50	81 06	681 66	400 00	92 43	36 00	241 55	221 66	8,848 86
Totals, Female Grammar	$102,995 00	$1,731 53	$10,111 17	$1,270 00	$1,491 98	$3,364 44	$4,723 47	$976 66	$126,664 25
Male Primary No. 1	$4,823 25	$15 49	$202 13		$61 00	$51 10	$231 65		$5,384 62
" " 2	2,735 25	77 46	113 78		38 35	20 75	66 87	$ 7 85	3,060 31
" " 3	4,314 70	53 45	176 87		29 00	52 00	140 87	3 00	4,769 89
" " 4	3,267 00	19 55	128 73		65 00	220 70	155 25	3 20	3,859 43
" " 5	5,722 50	80 50	241 94		94 80	407 69	267 74	65 00	6,880 17
" " 6	5,035 50	52 08	239 43	$150 00	94 81	777 05	174 40	16 24	6,539 51
" " 7	3,161 50	27 55	122 88		41 00	152 50	95 63	21 75	3,622 81
" " 8	2,755 80	24 45	106 04		96 00	14 75	147 00		3,144 04
" " 10	3,204 00	22 34	134 02		52 66		47 40	4 00	3,464 42
" " 11	6,626 60	186 71	312 97		249 28	33 22	259 57	48 50	7,716 85
" " 12	4,712 50	39 55	209 67	240 00	54 65	328 60	125 55		5,710 52
" " 13	2,797 20	33 35	106 57				297 82	6 00	3,240 94
" " 14	4,311 50	36 55	210 10		55 80	131 65	221 33	3 50	4,970 43
" " 15	5,080 50	35 76	214 95		81 72	24 00	99 60		5,536 53
" " 16	3,811 75	72 45	136 73		44 95	402 48	212 48	142 50	4,823 34
" " 17	4,127 00	73 57	220 63		42 50	10 22	122 80	1 50	4,598 22
" " 18	3,229 95	19 25	128 94		54 31	150 50	102 79	10 00	3,695 74
" " 19	1,805 75		120 03				123 00	3 00	2,051 78
" " 20	8,512 60	82 52	352 88		89 60	224 15	254 80	152 05	9,668 60
" " 21	4,066 50	57 99	198 01		103 07	15 35	126 25		4,567 17
" " 22	4,789 15	55 65	196 72	264 00	59 06		171 73	7 00	5,543 31

Male Primary No. 23	4,705 45	16 00	218 81		41 12		242 76	4 00	5,228 14
" " 24	5,938 25	32 27	273 38		50 16	30 66	269 76		6,594 48
" " 25	3,443 40	17 50	144 03		4 75		272 08	14 00	3,895 76
" " 26	3,234 00	34 63	120 01		43 50		88 82	29 38	3,550 34
" " 27	4,022 70	46 40	216 74		55 93		77 20	29 76	4,448 73
" " 28	3,739 75	72 05	147 25		103 31		125 55	36 60	4,224 51
" " 29	2,495 50	35 68	106 68		337 53	75 75	172 25	13 50	3,236 89
" " 30	7,101 50	98 23	332 95		36 33	104 78	290 20	12 00	7,975 99
" " 31	3,410 75	20 60	127 94				181 30		3,740 59
" " 32	4,333 00	25 60	179 62		11 39	5 00	239 70	24 55	4,818 86
" " 33	5,520 40	51 95	269 24		4 50	16 50	263 25		6,125 84
Male & Fem. Prim., No. 36.	2,057 20	5 00	221 78	345 00	6 00	586 39	89 49	67 58	3,378 44
* " " " 37.	458 00	26 60	134 86			60 75	20 47	82 80	783 48
Totals, Male Primary	$139,350 40	$1,548 73	$6,367 31	$999 00	$2,102 08	$3,896 54	$5,777 36	$809 26	$160,850 68
Female Primary No. 1	$5,141 25	$233 00	$171 77		$ 57 76	$ 14 97	$214 35	$ 21 50	$5,854 60
" " 2	3,211 00	117 63	139 09		98 71	304 48	76 75		3,947 66
" " 3	3,648 75	47 00	146 73		29 00	133 08	140 62		4,145 18
" " 4	3,241 50	34 34	110 81		75 55	225 50	159 71	3 20	3,850 61
" " 5	5,728 20	37 65	242 98		65 08	305 41	289 87	73 00	6,742 19
" " 6	5,203 40	67 77	203 72	$150 00	87 59	732 16	158 84	1 00	6,604 48
" " 7	3,153 70	14 50	107 95		28 00	156 80	104 77		3,565 72
" " 8	2,782 50	14 30	117 54		37 00		201 28		3,152 62
" " 10	3,225 00	19 70	110 20		39 54		58 46		3,452 90
" " 11	5,822 50	161 10	297 87		197 65	23 00	293 94		6,796 06
" " 12	5,089 00	55 46	207 39		101 78	299 60	152 31	6 70	5,912 24
" " 13	2,869 00	9 80	108 74			5 75	348 01		3,341 30
" " 14	3,827 25	30 15	177 95		34 50	298 18	243 94		4,611 97
" " 15	5,116 75	9 50	209 38		98 10	36 50	115 69	6 00	5,591 92
" " 16	3,338 25	40 15	116 97		40 00	396 28	232 82	94 50	4,258 97
" " 17	4,141 00	33 30	156 58		60 95		135 21		4,527 04
" " 18	3,246 75	31 47	139 47		37 32	6 90	150 19		3,612 10

* Opened October, 1893.

TABLE B—Continued.

Schools.	Salaries.	Repairs and Cleaning.	Books and Stationery.	Rents.	Heating Apparatus and its Repairs.	Furniture.	Fuel.	Incidentals, Printing, etc.	Totals.
Female Primary No. 19	$1,777 50	.....	$ 97 24	.....	$27 32	$39 06	$155 50	.....	$2,096 62
" " 20	7,444 70	$74 45	313 58	.....	78 00	95 19	259 76	$112 25	8,377 93
" " 21	3,714 75	26 53	161 65	.....	48 23	10 22	149 69	.....	4,111 07
" " 22	4,616 00	24 35	198 97	.....	49 66	.....	141 24	.....	5,030 22
" " 23	4,589 45	64 60	216 56	.....	47 70	.....	186 76	4 00	5,109 07
" " 24	5,899 70	55 02	282 84	.....	3 60	177 56	287 04	.....	6,705 76
" " 25	3,345 40	15 00	142 06	.....	.....	.....	306 19	14 00	3,822 65
" " 26	3,199 50	36 00	126 08	.....	50 50	.....	100 72	.....	3,512 80
" " 27	4,611 25	43 40	225 37	.....	76 58	58 47	116 82	.....	5,131 89
" " 28	3,678 45	47 40	161 45	.....	56 10	39 97	135 21	4 00	4,122 58
" " 29	2,429 25	14 50	92 11	.....	261 45	69 75	160 68	.....	3,027 74
" " 30	6,349 15	69 10	287 79	.....	34 80	22 50	344 02	.....	7,107 36
" " 31	3,387 00	32 40	107 73	.....	.....	.....	202 92	.....	3,730 05
" " 32	3,840 25	276 95	159 96	.....	5 97	127 48	261 42	.....	4,672 03
" " 33	4,518 75	9 65	185 07	.....	.....	15 00	219 92	6 50	4,954 89
Totals, Female Primary	$132,186 90	$1,746 17	$5,523 60	$150 00	$1,828 44	$3,593 81	$6,104 65	$346 65	$151,480 22
High and Grammar Colored	$9,066 80	$ 35 92	$ 829 65	.....	$ 103 85	.....	$ 147 57	$191 47	$10,375 26
Grammar Colored No. 2	3,939 75	56 85	296 77	.....	62 39	$ 71 50	202 58	22 70	4,652 54
" " 3	4,321 50	216 59	391 37	.....	98 59	40 50	220 10	75 10	5,363 75
Male Colored No. 1	3,324 15	.....	139 37	.....	.....	.....	97 50	.....	3,561 02
" " 2	3,809 25	41 97	169 14	.....	40 73	63 00	150 41	64 00	4,338 50
" " 3	5,176 20	236 29	226 90	$ 400 00	746 80	2,084 76	313 46	164 99	9,349 40
" " 4	5,238 10	94 60	200 94	590 00	114 85	33 35	110 26	.....	6,382 10
" " 5	2,426 50	67 35	99 93	.....	23 00	28 75	84 30	.....	2,729 83

Male Colored No. 6	3,604 50	57 34	140 84		37 30	366 30	130 30		4,336 58
" " 7	6,094 00	94 93	179 90		76 40		251 10		6,696 33
" " 8	4,275 15	81 50	205 76	276 00	88 45		80 20	23 50	5,030 56
" " 9	5,815 90	110 35	277 21	600 00	26 85	50 47	193 05	20 00	7,093 83
Female Colored No. 1	4,288 70	2 25	193 25				97 50	17 23	4,598 93
" " 2	3,636 00	35 24	140 21		54 40	63 00	162 38		4,091 23
" " 3	4,740 70	21 00	174 53		738 50	2,078 10	181 56	170 07	8,104 46
" " 4	4,941 90	66 35	226 75	518 66	101 99	5 75	110 26	7 88	5,979 54
" " 5	2,109 90	20 60	99 98		22 00	28 75	93 38	11 44	2,386 05
" " 6	3,127 90	57 68	150 13		38 25	379 02	135 21	18 09	3,906 28
" " 7	8,228 90	58 58	308 52		70 94	557 85	269 19	8 98	9,502 96
" " 8	4,526 95	54 85	187 72		75 38		122 38	8 68	4,975 96
" " 9	5,542 75	9 40	274 90		22 67	28 75	187 19	5 21	6,070 87
Totals, Colored	$98,235 50	$1,419 64	$4,913 77	$2,384 66	$2,543 34	$5,879 85	$3,339 88	$809 34	$119,525 98
*Male Polish Night	$ 257 00		$ 109 21			$10 22			$ 376 43
*Female "	181 50		37 56						219 06
*Bohemian Night	152 00		16 66					$ 8 50	177 16
Night No. 1	366 50		11 70					89 53	467 73
** " " 3	299 00							44 00	343 00
* " " 5	84 50		70 27					2 75	157 52
" " 6	430 50		51 60					53 78	535 88
** " " 8	275 00							38 51	313 51
** " " 11	455 00		23 32					125 54	603 86
* " " 12	84 00		8 83					48 40	141 23
" " 17	721 50		59 45					81 75	862 70
** " " 24	402 00							32 25	434 25
Colored Night No. 1	519 50		28 25					76 87	624 62
Totals, Night	$4,228 00		$416 85			$10 22		$601 88	$5,256,95

*Open in winter of 1893-4.
** " " 1892-3—discontinued. } Others open both winters.

TABLE B—Continued.

Schools.	Salaries.	Repairs and Cleaning.	Books and Stationery.	Rents.	Heating Apparatus and its Repairs.	Furniture.	Fuel.	Incidentals, Printing, etc.	Totals.
Annex, General Expense		$102 25						$185 85	$ 288 10
Annex No. 1	$3,590 95	40 15	$ 308 95	$144 00	$ 70 69	$ 7 00	$305 50		4,467 24
" " 2	9,826 75	50 00	663 63		107 82		499 15	15 92	11,163 27
" " 3 Male	3,495 75	222 60	335 53		44 96	5 75	181 85	28 30	4,314 74
" " 3 Female	3,070 50	195 61	375 35	125 00	107 99	321 27	33 63	199 65	4,429 00
" " 4	4,459 40	250 00	180 78				238 80		5,128 98
" " 5	3,659 25	126 76	166 28	350 00	54 85	209 66	192 60		4,759 40
" " 6	4,689 50	35 85	528 14				304 54	15 26	5,573 29
" " 7	5,951 25	40 65	397 85		97 62	15 25	301 88	15 89	6,820 39
" " 8	6,761 25	8 70	685 20	360 00	79 00	3,520 17	507 73	200 16	12,122 21
" " 9	4,379 50	28 15	237 86	300 00	22 87		306 15	17 61	5,292 14
" " 10	2,813 50	79 98	189 66		53 18	78 00	132 89	35 92	3,383 13
" " 11	6,237 95	2 50	450 08				795 25	37 54	7,523 32
" " 12	10,303 50	45 10	338 30	960 00	116 22	54 33	327 05	11 16	12,155 66
" " 13	10,782 95	342 83	605 52			11 50	729 49	4 80	12,477 09
" " 14	1,272 00	15 09	44 60	120 00	12 08	15 06	61 83	2 43	1,543 03
* " " 15	698 75	20 62	369 71	300 00		33 22	15 27	198 60	1,636 17
" " 34 Male	3,233 20	254 00	123 25		15 50		310 95	24 60	3,961 50
" " 34 Female	2,998 50	14 00	118 98		4 75	3 50	259 20		3,398 93
" " 35	2,626 00	9 00	129 42			60 00	679 10	25 00	3,528 52
" " 1 Colored	1,815 00	20 55	76 30	99 00	34 41		91 79	2 25	2,139 30
" " 3 "	1,294 50	14 68	66 71		14 93	30 66	54 25	7 50	1,483 23
" " 10 "	1,923 30	20 60	86 95	258 00	30 33	20 00	69 36	2 50	2,411 04
Totals, Annex	$95,883 25	$1,939 67	$6,479 05	$3,016 00	$867 20	$4,385 31	$6,398 26	$1,030 94	$119,999 68

*Opened September, 1893.

TABLE B--Concluded.

Summary of the Itemized Expenditures of the Several Grades of Schools.

Schools.	Salaries.	Repairs and Cleaning.	Books and Stationery.	Rents.	Heating Apparatus and its Repairs.	Furniture.	Fuel.	Incidentals, Printing, etc.	Totals.
General Expense & Library.	$ 26,530 00	$ 1,169 20	$ 465 34	$ 300 00	$ 56 29	$ 2,517 98	$ 56 13	$ 6,634 77	$ 37,729 71
Baltimore City College	31,760 00	291 57	1,617 34	.....	58 75	758 44	495 67	1,594 44	36,576 21
Female High Schools	26,825 50	168 93	2,066 63	.....	246 49	241 00	886 28	503 18	30,938 01
Male Grammar Schools	114,686 50	2,596 81	10,658 41	675 00	1,632 51	6,275 79	4,544 26	785 43	141,854 71
English-German Schools	76,933 15	942 37	5,632 42	1,304 17	585 96	1,292 46	2,892 38	747 91	90,330 82
Female Grammar Schools	102,995 00	1,731 53	10,111 17	1,270 00	1,491 98	3,364 44	4,723 47	976 66	126,664 25
Male Primary Schools	139,350 40	1,548 73	6,367 31	999 00	2,102 08	3,896 54	5,777 36	809 26	160,850 68
Female Primary Schools	132,186 90	1,746 17	5,523 60	150 00	1,828 44	3,593 81	6,104 65	346 65	151,480 22
White Schools	$651,267 45	$10,195 31	$42,442 22	$ 4,698 17	$ 8,002 50	$21,940 46	$25,480 20	$12,398 30	$ 776,424 61
Colored Schools	98,235 50	1,419 64	4,913 77	2,384 66	2,543 34	5,879 85	3,339 88	809 34	119,525 98
Night Schools	4,228 00	.....	416 85	.....	.....	10 22	.....	601 88	5,256 95
	$753,730 95	$11,614 95	$47,772 84	$ 7,082 83	$10,545 84	$27,830 53	$28,820 08	$13,809 52	$ 901,207 54
Manual Training Schools	20,970 25	751 67	1,271 48	.....	421 14	354 60	985 41	7,714 54	32,469 09
Annex Schools	95,883 25	1,939 67	6,479 05	3,016 00	867 20	4,385 31	6,398 26	1,030 94	119,999 68
World's Fair Exhibit	.....	.....	.....	.....	.....	54 00	.....	4,672 73	4,726 73
Totals	$870,584 45	$14,306 29	$55,523 37	$10,098 83	$11,834 18	$32,624 44	$36,203 75	$27,227 73	$1,058,403 04

TABLE C.

Showing the Location of Schools, Size of Lots, Amount of Ground Rents, Amount Paid on Account of Lots, Size of Buildings, Estimated Value of Buildings, and Date of Erection.

Schools.	Location.	Size of Lot.	Amount of Ground Rent.	Amount paid on account of Lot.	Size of Building.	Estimated Value of Building.	Date of Erection.
Baltimore City College	Howard, opposite Centre	120 x 260	$4,600 00		100 x 162	$110,000	1874
E. F. High School	Aisquith and Orleans	102 x 210	540 91	$2,651 50	102 x 56	80,000	1868
	Side lot and rear building	39 x 180	75 00	15,000 00	51 x 58		
W. F. High School	Fayette, near Paca	98 x 144	1,188 00		72 x 132	55,000	1858
new lot	S. E. cor. McCulloh st. and Lafayette ave	97[9] x 230		30,666 66			
Manual Training School	Courtland, near Saratoga (old building)	82 x 90		6,437 75	44 x 90	18,000	1868
	" " (new ")	62[6]x 90	220 00	10,000 00	54 x 90	25,000	1890
Male G. and P. No. 1	N. E. corner Fayette and Greene	97 x 102	354 00	9,000 00	83 x 96[7]	25,000	1880
Female G. and P. No. 1	S.W. " " "	77[6]x 170	1,094 75		62 x 140	27,000	1875
Grammar No. 2	Broadway and Bank	100 x 141	244 44		101 x 39	30,000	1888
	" " (rear building)				52 x 87		
G. and P. No. 3	High, near Fayette	80 x 167*	900 00		50 x 145	28,800	1875
Grammar No. 4	Sharp, near Montgomery	100 x 155	600 00		56 x 85	18,000	1869
" " 5	Greenmount avenue and Eager	66 x 150*	600 00		55 x 100	17,000	1872
" " 6	Division, near Lanvale	104[2] x 171[3]	800 00		55 x 120	21,000	1877
" " 7	Eastern avenue and Burke	100 x 150	350 00		52 x 136	24,000	1880
" " 8, old	Hollins, near Fulton	140 x 129	700 00		54 x 112	18,000	1877
" " 8, new	Hollins and Monroe	Old lot.			55 x 104	21,000	1890
" " 10	William and Warren avenue	70 x 140	175 00		44 x 103	13,000	1850
" " 11	Bond and Jefferson	70 x 152[3]	19 00	8,700 00	56 x 116	20,000	1884
" " 12	Ridgely, near Fremont	124 x 155	620 67		73 x 125	25,000	1877
" " 13	Aisquith, near Lexington	55 x 180	25 00	12,600 00	44 x 100	17,000	1870
Male Grammar No. 15	Carrollton avenue, near Lexington	100 x 160[4]	400 00		55 x 107	20,000	1860

F. Gram. No. 15	Carrollton avenue and Lexington	49^{6} x 103		$10,000 00	49 x 135	$20,000	1886
Grammar " 16	Hull and Clement (Locust Point)	100 x 155^{3}	$ 350 00		56 x 113	18,000	1882
" " 17	Washington, near Fayette	93 x 190	581 25		52 x 119	20,000	1871
" " 18	Harlem avenue and Monroe	85 x 249^{6}	480 00		56^{4}x 143^{6}	30,500	1893
Gram. and Prim. No. 19	Park avenue and Hoffman	120 x 150	1,020 00		100 x 147	35,000	1892
Grammar No. 20	Eden and Federal	180^{6}x 100		8,000 00	60 x 124	33,000	1890
" " 21	Presstman and Gilmor	102^{5}x 155	620 00		55 x 121	32,000	1876
" " 22	Mulberry, near Fremont	87^{8}x 134	350 67		54 x 85	15,000	1868
Eng-Ger. " 1, old	Druid Hill avenue, near Biddle	75 x 100	150 00		44 x 100	12,000	1841
† " " 1, new	Pennsylvania avenue and Dolphin	189x80 (110)	1,147 50		56^{4}x 138	26,000	1893
" " 2	Charles and Ostend	74^{6}x 219^{2}	372 50		56 x 150	28,000	1882
" " 3	Baltimore, near Aisquith	90 x 170	1,000 00		54 x 118	23,000	1879
" " 4	Chase and McDonogh	80 x 223	501 75		56 x 183^{2}	30,500	1882
" " 5	Lexington, near Fremont	81 x 220^{6}		15,000 00	60 x 124	25,000	1890
Primary " 2	Gough and Stiles	75 x 92	250 00	3,500 00	32 x 55	9,000	1854
" " 4	Hanover and Lee	80 x 76^{6}	210 00		52 x 76	6,000	1834
" " 5	Broadway and Ashland avenue	120 x 120	600 00		60 x 113	24,000	1876
" " 6	Ann, near Canton avenue	63 x 140	112 50	6,800 00	46 x 100	14,800	1878
" " 7	Mullikin, near Aisquith	74 x 100	**		45 x 65	5,000	1864
" " 8	Caroline, near Lombard	105^{5}x 150	221 34	6,200 00	94^{7}x 59^{7}	18,000	1888
" " 10	Hollins, near Schroeder	60^{8}x 134	200 00		46 x 70	6,000	1855
" " 11	Gilmor and Mosher	126^{2}x 156^{10}	757 00		57^{9}x 104	30,000	1886
	" " " (rear building)				30^{7}x 105^{6}		1889
" " 12	Barre and Warner	67 x 120	268 00		55 x 84	16,000	1870
" " 13	Patterson Park avenue and McElderry	155 x 115	530 00		55 x 105	21,000	1890
" " 14	Linden avenue and Wilson	105 x 150	840 00		55 x 117	20,000	1882
" " 15	Saratoga and Carrollton avenue	100 x 150	700 00		50 x 120	19,000	1872
" " 16	Harford and Ashland avenues	105 x 158*	790 00		56 x 113	19,000	1876
" " 17	Light and Poultney	62^{1}x 122	217 00	800 00	50 x 72	10,000	1875
" " 18	Argyle avenue, near Lanvale	80 x 140	315 00		45 x 68	13,000	1858
" " 20	Eden and Preston	100 x 207	592 00	6,000 00	51 x 167	35,000	1868
" " 21	Pennsylvania avenue and Robert	80 x 155	320 00		50 x 80	16,000	1869
" " 22	Ramsay, near Scott	71 x 128^{6}	177 50		45 x 95	10,000	1855
" " 23	Gough and Wolfe	75 x 110	150 00	2,400 00	57^{9}x 104	19,000	1886

TABLE C—Concluded.

Schools.	Location.	Size of Lot.	Amount of Ground Rent.	Amount paid on account of Lot.	Size of Building.	Estimated Value of Building.	Date of Erection.
Primary No. 24, new	Lancaster and Patuxent	150 x 100		$7,500 00	77 x 86	$21,000	1890
" " 24, old	Chesapeake and Hudson (Canton)	80 x 100			32 x 50	5,000	1853
" " 25	Caroline, near Canton avenue	129[6]x 110		14,962 50	93 x 90	25,000	1892
" " 26	Orleans, near Bond	84 x 75	$126 00	4,500 00	50 x 65	15,000	1874
" " 27	Fayette and Chester	92 x 120	274 50		48 x 72	18,000	1869
" " 28	Battery avenue and Clement	75 x 82	270 00	1,000 00	46 x 82	15,000	1869
" " 29	Sharp, near West	114 x 155	570 00		55[9]x 104	21,600	1886
" " 30	Hollins, near Fulton	150 x 129[6]	750 00		55 x 82	16,000	1874
" " 31	Schroeder and Pierce	60 x 122	228 00	2,500 00	57 x 102	21,000	1890
" " 32	Guilford avenue and Lanvale	80 x 154		11,800 00	67 x 98	21,000	1890
" " 33	Light and Clement	100 x 100		10,000 00	67 x 98	21,000	1890
Col. Manual Training	Fremont, near Lombard	74 x 150		1,200 00	44 x 65	8,000	1843
H. & G. & Col. P. No. 1	Saratoga, near Charles	66 x 193	600 00	16,000 00	52[2]x 126[8]	25,000	1888
Colored Grammar No. 2	Jefferson, near Caroline	83[6]x 80	200 00	1,350 00	32 x 80	5,000	1855
Colored Grammar No. 3	Howard and Montgomery	50 x 104	160 00	8,000 00	40 x 64	6,000	1872
Colored Primary No. 2	East, near Lexington	75 x 105	25 00	5,125 00	49 x 80	13,000	1874
" " " 3	Hill, near Sharp	86 x 90 (155)	192 00	9,600 00	76[9]x 133[11]	27,000	1893
" " " 4	Biddle, near Pennsylvania avenue	70 x 150	70 00	5,000 00	40 x 92	10,000	1870
" " " 5	Caroline, near Bank	76 x 90	134 00	4,800 00	45 x 65	8,000	1867
" " " 6	Barre, near Eutaw	65 x 112	300 00		40 x 80	10,000	1854
" " " 7	Waesche, near Fremont avenue	143[9]x 120*	480 00		59 x 120	22,000	1877
" " " 8	Bond and Ashland avenue	80 x 80	130 00		40 x 54	7,000	1864
" " " 9	Carrollton and Riggs avenues	97[1] x 157		7,000 00	52[4]x 97[5]	19,000	1888
Annex No. 1	Homestead, Gorsuch avenue	42 x 90		1,000 00	35 x 50	4,500	.....

Annex No. 2	Waverly, York road	100 x 200		4,000 00	35^{6}x 90	} 14,500	
	Rear building				50 x 33		
" " 3, Male	Oak and Fifth (Twenty-fourth) street	60 x 122		4,000 00	50 x 60	10,000	
" " 4	Chestnut and Fourth avenues	176_{8}x 230		5,000 00	55 x 105	21,000	1890
" " 5	Hampden, Merryman's lane	87 x 240*		1,000 00	71 x 24	1,000	
" " 6	Same as No. 4						
" " 7	Woodberry, on Woodberry avenue	45 x 130	22 50		37 x 96	10,000	
" " 8, old	Clifton, on Clifton avenue	40 x 150		2,000 00	40 x 90	4,000	
" " 8, new	Francis, near Fulton avenue	150 x 150	480 00		64^{4}x 105_{7}	25,000	1893
" " 9	Calverton, Bloomingdale road	75 x 169		1,500 00	60 x 100	15,500	1893
" " 10	Carroll, Old Frederick road	60 x 225*	01	2,000 00	52 x 27	4,500	
" " 11	Millington avenue and Lehman street	80 x 200*	240 00		64 x 119	21,000	1892
" " 13	North avenue and Washington street	80 x 150		5,000 00	66 x 120	25,000	1891
" " 15	N. E. cor. Ninth and North-west streets	128 x 194		4,718 66	66^{5}x 106	25.000	1894
" " 34	Huntingdon avenue, near Charles street	100 x 150		7,000 00		18,000	1890
" " 35	Old Frederick road and Fairview avenue	150 x 257*	360 00		67 x 92	15,000	1892
Annex Colored No. 1	Waverly, Merryman's lane	127^{5}x 32^{6}*	50 00		24^{6}x 48	700	
" " " 3	Frederick road, near toll-gate	41 x 283*	50 00	1,000 00	24 x 108	1,000	

*Irregular in form. †Occupied by Baltimore City College. **Houses built on the rear of lot leased for E. F. H. School.

Total amount paid on account of lots	$ 302,312 07
Total value of buildings, actual or estimated	1,854,900 00
Amount of ground rents in the above list	$33,234 79

TABLE D.

Showing Locations of Rented Buildings, by what Schools Occupied, and Amounts of Rent Payable.

General storage, Hasselberger court	$ 300 00
Grammar No. 6, 1310 Division street	360 00
Male Grammar No. 9, 808 North Calvert st.	540 00
Female Grammar No. 9, 411 N. Courtland st.	600 00
English-German No. 3, 1112 E. Baltimore st.	600 00
Primary No. 6, Canton ave., near Broadway	300 00
Male Primary No. 12, 712 Warner street	240 00
Primary No. 22, 786 Columbia avenue	264 00
Male Primary No. 36, Collington avenue and Lombard street	460 00
Female Primary No. 36, 23 S. Collington ave.	240 00
Primary No. 37, N. W. corner Hoffman street and Collington avenue	500 00
Male Colored No. 8, McDonogh and Barnes sts	276 00
Male Colored No. 9, 2211 Pennsylvania ave.	600 00
Annex No. 1, Homestead	144 00
Female Annex No. 3, 38 E. Huntingdon ave.	500 00
Annex No. 5, Hickory ave., near Fourth ave.	350 00
" " 9, Calverton road and Edmondson avenue	300 00
Annex No. 12, Lombard st., near Wilkens	600 00
" " 12, Calverton ave. and Lipps' lane.	360 00
" " 14, Park Heights avenue	120 00
" " 15, North avenue and Twelfth st.	900 00
Annex Colored No. 1, Merryman's lane	120 00
Annex Colored No. 10, 21½ st., near Barclay.	240 00
Annex Colored No. 10, 330 22½ street	120 00
Total amount of rents	$9,034 00

SCHEDULE

—OF—

Salaries of Officers and Teachers of Public Schools.

GENERAL EXPENSE ROLL.

Superintendent of Public Instruction	$2,500
Assistant Superintendent	2,000
Secretary	2,000
Assistant Secretary	1,500
Superintendent of Supplies	1,800
Committee Clerk	480
Librarian	1,200
Superintendents of Music, each	1,500
Librarian of Public School Library	900
Supervisor of Drawing	720
Teachers of Drawing, each	500
Directress of Sewing	600
Teachers of Sewing, each	500

BALTIMORE CITY COLLEGE.

Principal	$2,400
Professors (not otherwise specified)	2,000
Professor of Writing and Book-keeping, and Secretary to Faculty	2,000
Professor of Drawing	1,800
Adjunct Professors	1,800
Tutors	1,000

FEMALE HIGH SCHOOLS.

Principals	$2,400
First Assistants	1,008
Other Assistants and Teachers, each	900

BALTIMORE POLYTECHNIC INSTITUTE.

The present principal of this school is an officer of the United States Navy, detailed for service at this school, and receives from this Board	$ 500
First Assistant	1,200
Instructors	1,200
Assistants $600, $720, $900,	1,000

COLORED MANUAL TRAINING SCHOOL.

Instructors	$900
Assistants	600

MALE GRAMMAR SCHOOLS.

	1st Year.	2d Year.	3d Year.
Principals	$1,296	$1,404	$1,500
First Assistants (Male)	804	900	
First Assistants (Female)	588	672	
Second Assistants	456	516	
Third Assistants	444	504	

ENGLISH-GERMAN SCHOOLS.

	1st Year.	2d Year.	3d. Year.
Principals	$1,296	$1,404	$1,500
Vice-Principals	804	900	1,008
First Assist's (Eng. Fem.)	564	648	
First Assist's (Ger. Male).	600		
Teacher in charge of lowest grade			504

Other assistants in grammar grades, same as third assistants in male grammar schools.

Assistants in primary grades, same as assistants in primary schools.

FEMALE GRAMMAR SCHOOLS.

	1st Year.	2d Year.
Principals	$804	$900
First Assistants	564	648
Second Assistants	444	504
Third Assistants	432	480

MALE AND FEMALE PRIMARY SCHOOLS.

	1st Year.	2d Year.	3d Year.
Principals	$600	$696	
Assistants	408	432	$468
Teacher in charge of lowest grade			504

HIGH AND GRAMMAR COLORED SCHOOLS.

Principal and teachers of grammar grades the same as male grammar schools.

Assistants in High School department $672

COLORED PRIMARY SCHOOLS.

	1st Year.	2d Year.	3d Year.
Principals (male)	$804	$900	
Principals (female)	600	696	
First Assistants (male)	700		
Assistants (female)	408	432	$468
Teacher in charge of lowest grade			504

INTERMEDIATE SCHOOLS.

	1st Year.	2d Year.	3d Year.
Principals (males)	$1,200		
Principals (females)	804		
First Assistants	600		
Teacher in charge of lowest grade	444	$468	$504

Other assistants in grammar grades, same as third assistants in female grammar schools.

Assistants in primary grades, same as assistants in primary schools.

UNCLASSIFIED SCHOOLS.

Composed of Primary and Grammar Scholars and Not Otherwise Designated.

	1st Year.	2d Year.	3d Year.
Principals	$696	$780	$900
First Assistants	504	552	600

SATURDAY NORMAL CLASS.

Principal	$200
Assistants	150

NIGHT SCHOOLS.

Principals, $2.50 per night for actual service.

Assistants, $1.50 per night for actual service.

The Schedule of Salaries to be Subject to the Following Conditions:

All below the grade of second assistant in male and female grammar schools to be graded as third assistants, the Board of School Commissioners to determine at the annual election the grade of each assistant; in case of failure to do so, the senior assistant to grade highest in all cases.

In male and female grammar schools not employing three assistants, the lowest assistant shall rank as third assistant, and so continue until there are three assistants employed in that school, excepting the first assistant, who shall in all cases rank as first assistant.

Teachers who may have served for *two full* years in any of the public schools of Baltimore, upon promotion to grammar schools shall be entitled to the second year's salary of the grade to which they may be assigned, excepting that of principal, and teachers who shall have served three full years, counting the time served in the public schools of Baltimore and the time served in any school or schools of recognized merit, shall be entitled to the highest salary of the grade to which they shall be assigned (excepting the grade of principal of grammar school), from and after the date upon which they submit satisfactory written evidence of that fact to the President of the Board, who shall be vested with power to decide.

Teachers elected during the month of September shall receive the full salary for the months of July and August of the succeeding year; those elected in October shall receive nine-tenths of said salary; in November, eight-tenths, and so on to the close of the scholastic term.

Any teacher who shall have served the usual probationary period of ninety days before the close of the scholastic year, and who shall be elected at the annual election, shall receive her proper proportion of salary for July and August.

When transfers are made from one school or position to another the teacher transferred shall draw the salary of the position from which he or she has been transferred till the end of the month in which the transfer shall be made.

SALARIES OF JANITORS, JANITRESSES AND FIREMEN.

Janitor and Fireman of Baltimore City College	$1,000
Assistant Fireman of Baltimore City College	600
Janitor of Baltimore Polytechnic Institute	720
Fireman of Baltimore Polytechnic Institute	720
Janitor of Baltimore Polytechnic Institute, new building	720
Fireman of Eastern Female High School	480
Fireman of Western Female High School	400
Janitresses of Female High Schools, each	300

Fireman and Engineer of No. 3 English-German School, $40 per month. For large furnaces in schools having the Smead system, $10 each per month, and for all furnaces in other schools, $5 each per month.

Janitresses of schools having three class-rooms shall receive $9.00 per month; four class-rooms, $10.00 per month; five class-rooms, $11.00 per month; six class-rooms, $11.50 per month; and increase fifty cents per month for each additional class-room. They shall receive additional compensation for making fires in stoves from October to April, inclusive, at the rate of 50 cents per month for each stove on the first floor, and 75 cents for each stove on the second and third floors. The salaries of janitresses of schools containing more than twelve class-rooms, and of janitresses of buildings used as branches of schools, shall be fixed by the President and Secretary, subject to the approval of the Board.

Janitresses of Night Schools, $5 per month.
Firemen " " $4 "

REPORT

—OF THE—

Superintendent of Public Instruction.

BALTIMORE, January 1, 1894.

To the Honorable the Mayor and City Council,
and the Board of Commissioners of
Public Schools of Baltimore City.

GENTLEMEN:

The following report of the condition and statistics of the schools for the year ending December 31, 1893, is submitted for your consideration.

SUMMARY OF STATISTICS.

Population of Baltimore—white, 384,-394; colored, 71,033 (U. S. census 1890)	455,427
Population in 1893, estimated	523,800
Enumeration, school census, 1888	110,731
School age	6–21
Basis of taxation	$322,093,616
School tax—City 25, State 10½	35½ mills.

Number of pupils in school during the year		69,425
Increase	1,814	
Number of pupils on roll December 31, 1893		57,048
Increase	2,642	
Number of teachers December 31, 1893		1,464
Increase	72	
Number of schools December 31, 1893.		160
Increase	4	
Percentage of attendance on enrollment		85
Increase	1 per ct.	

HIGH SCHOOLS AND COLLEGE.

Number of pupils on roll December 31, 1893		1,515
Increase	148	
Percentage of attendance		93
Same as last year.		
Number of pupils to a teacher on enrollment		34
Same as last year.		
Number of pupils to a teacher on average attendance		32
Increase	1	

POLYTECHNIC INSTITUTE.

Number of pupils on roll December 31, 1893		486
Increase	151	
Percentage of attendance		94
Decrease	1	
Number of pupils to a teacher on enrollment		25
Decrease	1	
Number of pupils to a teacher on average attendance		21
Decrease	2	

GRAMMAR SCHOOLS.

Number of pupils on roll December 31, 1893		13,439
Increase	610	
Percentage of attendance		89
Increase	1 per ct.	
Number of pupils to a teacher on enrollment		38
Decrease	1	
Number of pupils to a teacher on average attendance		33

Same as last year.

ENGLISH-GERMAN SCHOOLS.

Number of pupils on roll December 31, 1893		5,493
Increase	54	
Percentage of attendance		90
Increase	2 per ct.	
Number of pupils to a teacher on enrollment		40
Decrease	1	
Number of pupils to a teacher on average attendance		36

Same as last year.

PRIMARY SCHOOLS.

Number of pupils on roll December 31, 1893		21,341
Increase	577	
Percentage of attendance		84
Increase	1 per ct.	
Number of pupils to a teacher on enrollment		41

Same as last year.

Number of pupils to a teacher on average attendance		34

Same as last year.

COLORED SCHOOLS.

Number of pupils on roll December 31, 1893		7,539
Increase	256	
Percentage of attendance		78
Decrease	1 per ct.	
Number of pupils to a teacher on enrollment		39
Decrease	2	
Number of pupils to a teacher on average attendance		30
Decrease	2	

ANNEX SCHOOLS.

Number of pupils on roll December 31, 1893		7,148
Increase	902	
Percentage of attendance		81
Increase	1 per ct.	
Number of pupils to a teacher on enrollment		41
Same as last year.		
Number of pupils to a teacher on average attendance		34
Decrease	1	

The number of pupils on roll December 31, 1893, was 57,048, showing an increase for the year of 2,642 pupils.

The increase in enrollment was distributed as follows: In the College and the High schools the increase was 148, in the Polytechnic Institute it was 95, in the grammar schools it was 610, in the primary schools it was 577, in the colored schools 256, and in the Annex schools it was 902. The average attendance of the schools was 85 per cent. of the enrollment, an increase of 1 per cent. over that of last year. In the College, the High schools and the Polytechnic Institute the attendance was excellent, averaging 93 per cent. In many of the grammar, primary and English-German schools it was also excellent, but in some of the grammar, English-German and primary schools better attendance should have been secured. In the colored schools the attendance was not good, and there is great necessity for adopting some means for decreasing the number of cases of absence and lateness in these schools. It is very difficult in the majority of cases to secure the support and co-operation of the parents of the colored children, and the rules of the Board relating to the attendance of pupils are not enforced in the colored schools. There is great need for improving the attendance in these schools, not only as a means of securing better progress in the studies pursued in the schools, but on account of what is far more important to the pupils and the community as a means of cultivating good habits in the children and in bringing them up to be orderly, capable and useful citizens. The reason for the existence of a school system maintained at public expense

is that it civilizes the children of the community and forms in them such habits as will make them good and useful citizens. I am satisfied if the rules of the Board were firmly and reasonably enforced in the colored schools that they would greatly improve in attendance and become more useful to the children who attend them and to the community at large.

ACCOMMODATIONS.

The unusually large increase in the enrollment during the year is attributable in a large measure to the additional accommodations afforded by the new school-houses erected during the year out of the fund appropriated by the City Council. The schools are better supplied with accommodations at this time than I have ever known to be the case before, but the overcrowded condition of some of the schools still demands your consideration. Additional school-houses are also needed in portions of the city that have recently increased in population. In this connection your attention is called to the following statement of the particular needs of the system. In the accompanying report of the Assistant Superintendent will also be found a statement of the condition of the primary schools in this respect.

The transfer of the pupils of Baltimore City College from the building on the corner of Greene and Fayette streets to the new building on Pennsylvania avenue and Dolphin street, has put the college in possession of a

building better suited to its requirements, and it has also greatly improved the condition of Male Grammar School No. 1.

The opening of the new building for Grammar School No. 18, on Harlem avenue and Monroe street, has provided the grammar school pupils of this section with convenient grammar school facilities, and it has also afforded relief to the overcrowded grammar schools, No. 15 and No. 21, located in the vicinity.

The building authorized to be constructed in the southwestern section of the city will provide long-needed accommodations for Annex School No. 12, the lack of which has for a long time caused great inconvenience to the school and seriously retarded its progress. The school now is provided with very inadequate and unsuitable accommodations. It is kept in three buildings: the basement of a church, a building adjoining the church formerly used for a parish school, and a rented dwelling located at some distance from the other two buildings. Nearly all the rooms in these buildings are too small, most of them are badly lighted and ventilated, and they are not conveniently located for the use of a school to be supervised and controlled by one principal. On account of the health and the proper discipline and instruction of the pupils, it is highly important that the new house should be speedily completed and occupied by the school.

The new building erected for the use of Annex School No. 8, on Francis street near Fulton avenue, has provided the school with more healthful accommodations and also with the requisite number of class-rooms. This will enable the school to do better work, and also help to relieve the overcrowded condition of Female Grammar School No. 21, situated not far to the southward.

The new building now being put up at Walbrook for the use of Annex School No. 15 will amply provide that section with grammar and primary school facilities for some time to come.

The addition to Annex No. 9, located at Calverton, which is nearly completed, will provide ample grammar and primary school accommodations for all the pupils living in the neighborhood.

The new building erected for the use of Colored School No. 3, on Hill street, near Sharp, provides the school with ample accommodations.

It is very desirable that the building for the use of the Western Female High School should be completed and occupied by the school as soon as possible, as the growth and progress of the school are greatly impeded by the lack of suitable and sufficient accommodations.

There is need of increased accommodations at the Eastern Female High School. As there is sufficient

ground for the purpose it would be advisable to erect an addition to the building to provide the necessary number of class-rooms.

No.6 Grammar School, as was stated in my last report, is still overcrowded in the main building, while some of its classes have to be taught in a rented house entirely unsuitable for school purposes. This state of affairs has existed for a long time, and has seriously interfered with the successful operation of the school. It is very important to supply the school with the necessary accommodations. This section of the city is not adequately supplied with space to meet the wants of the number of children residing in it. The schools in the adjacent districts are full or overcrowded also, and it seems to me the only solution of the difficulty lies in enlarging No. 6 by adding an additional story to the building, or by establishing a new grammar school somewhere northwest of this locality.

No. 9 Grammar and Primary Schools have been conducted in rented dwellings in the neighborhood since the building they formerly occupied was taken for the use of the Polytechnic Institute. The buildings which they now occupy are not suitable for school purposes.

No. 10 Grammar School. The female department of this school, as was stated in my last report, needs additional room for the accommodation of its classes. It is necessary to instruct three classes in two of the class-

rooms. Good work cannot be done under such unfavorable conditions. Teachers and pupils are not only subjected to serious inconvenience which interferes with the instruction of the children, but their health is impaired by the lack of a sufficient amount of pure air. As there is room for some of the pupils of this school in No. 4 Grammar School, not far away, and as the building now occupied by No. 17 Primary School is very badly lighted, and the class-rooms too small, it is recommended that No. 10 Grammar School, which is located in the extreme north of its district, be moved farther south, that No. 17 Primary School be moved to the building now occupied by No. 10 Grammar School, and that the district lines of No. 4 and No. 10 Grammar Schools be changed so as to give a portion of the northern district of No. 10 to No. 4. This part of the city has been built up to the south and east very considerably within the last few years, and as the erection of dwellings on the ground yet unoccupied will continue, by carrying out these recommendations this neighborhood will be adequately supplied with grammar school facilities for some time to come.

English-German Schools No. 2 and No. 4 have a larger number of pupils on roll than their buildings will properly accommodate, and it is important on account of the health and progress of the children that some arrangement should be made for supplying these schools with healthful and adequate accommodations.

English-German School No. 5. Needed relief has been afforded this school by accommodating some of its classes in the second story of Grammar School No. 22, on Mulberry street, near Fremont.

Colored Schools No. 4, No. 7 and No. 9 are still overcrowded, and it is necessary to make some arrangement that will afford them adequate accommodations.

No. 8 Colored School, located on Bond street and Ashland avenue, is very much in need of additional room. Only one of the classes of the male department can be accommodated in the main building, the other rooms being occupied by the female department. Several of the classes of the male department have to be taught in rented rooms, which are not suitable in any respect for class-rooms. The principal has little opportunity to overlook the instruction and discipline of his classes under such circumstances.

Annex School No. 1 needs, as has been stated in former reports, or will in a short time need, an addition capable of supplying the school with four additional class-rooms. Two classes of the school are taught in very small rooms in a rented dwelling situated a short distance from the main building.

Annex School No. 7 needs an additional room for one of its classes. It is necessary for two teachers to instruct two classes in one room. This impairs the health

of the pupils, besides seriously interfering with their instruction.

Annex No. 4 and Annex No. 6 are kept in the same same building, located at Chestnut and Fourth avenues. The building contains twelve class-rooms, and the number of teachers in both schools is sixteen, which, in four instances, necessitates two teachers to teach their classes in one class-room. Two classes cannot be satisfactorily taught in one room. Besides the lack of proper conditions for the best instruction, the foul air occasioned by overcrowding the rooms renders the pupils dull and listless, and at the same time lays the foundation for disease. This section of the city is increasing in population, which will be the case more and more, as it has been made much more accessible to the city proper by the Lake Roland Electric Railway, and it is important to give the matter proper consideration. The city owns the building west of No. 5, formerly used for school purposes, and the difficulty existing at Nos. 4 and 6 would be remedied if a sufficient number of pupils of Annex No. 5 living near enough to attend were transferred to this building and the space they vacated at No. 5 were occupied by some of the pupils of No. 4. This arrangement, it seems to me, would relieve the overcrowded condition of No. 4 and No. 6 if properly carried out, and at the same time it would place the children in buildings nearer their homes.

DISCIPLINE.

The bi-weekly reports of corporal punishment sent to the office by the principals of the various schools give the following information in regard to the infliction of this kind of punishment during the year. Eight hundred and forty-nine cases were reported, all of which occurred in twenty-nine schools, the other schools of the system, numbering one hundred and thirty, not having had occasion to resort to the use of corporal punishment once during the entire year. In one school it was found necessary to use this method of punishment one hundred and eighty times; in another one hundred and sixty-four times; and in others ninety-four, eighty-two and sixty-four times respectively. The Board, by it rules, allows only the principal to inflict corporal punishment, and requires a full account of each case to be made in a bi-weekly report, which is sent to the office. Although this kind of punishment is permitted, as it should be—for in the most extreme cases, all other means having failed, it is, in the opinion of the best and most humane educators, salutory and indispensably necessary, and its administration urged by many parents —yet the Board, by all the means in its power, endeavors to prevent its hasty and injudicious use. The mere fact that such punishment may be resorted to, in case of absolute necessity, acts as a restraint upon some pupils, who would otherwise be unmanageable. Some of the principals of the colored schools manage well

almost entirely without its use; and this plan, experience shows, is a much better one than that of frequently using this kind of punishment. The frequent infliction of corporal punishment in a school is evidence of the lack of disciplinary power on the part of the teachers. The power to teach well, self-control, and good judgment on the part of the teacher, render the infliction of this kind of punishment almost entirely unnecessary. It is gratifying to call attention to these reports to show that most of our teachers, by securing the co-operation of parents, the aid of their local committees and principals, and, above all, by becoming better qualified for the discharge of their duties, are meeting with more success with a minimum amount of this punishment, or, in most of the schools, entirely without its use, than was the case formerly when the use of the rod was more frequently resorted to. Speaking generally, it may be said that the discipline of the schools is becoming daily more satisfactory. Truancy is less frequent; absence without a sufficient cause does not occur so often; pupils are more promptly in their places at the beginning of the morning and evening session; and orderly conduct and industry prevail to a greater extent than has ever before been the case. As a necessary consequence, if no other reason existed, better progress in studies and more efficiency in the system generally are being secured. Efforts have been made to impress upon the teachers the responsibility of their work and the necessity for thorough preparation to discharge

their duties in such a manner as to secure the best results. By the rules of the Board the several local committees are invested with powers and duties to be exercised in helping to prevent truancy, unnecessary absence and too frequent lateness, and to require patrons to perform their duty in the work of educating the youth of the city. Wherever the local committee, principal, teachers and parents are educated by a wise local administration to a hearty and prompt co-operation, which may be secured by judiciously carrying out the rules of the Board as therein directed and required, a healthy tone prevails and the effects of the school system are being felt for good. On the other hand, a reasonable amount of efficiency is not secured in schools where principals and teachers do not labor to secure this necessary co-operation, and whose patrons allow their children to violate the rules of the Board with impunity. Some parents are too indulgent to their children and desire their own unwise methods to be adopted by teachers. In many instances pupils, by the lax manner in which the rules are enforced by those whose duty it is to see that they are complied with, are often allowed to wander from school to school in the vain hope of finding one in which they may make rapid advancement and be allowed to do as they please—to come to school when they choose, to study when inclined and to obey or not as they feel disposed. It was expected and hoped when the Board set apart a district for each school and declared that pupils should attend

school in their own district, that the effects of this requirement would in many ways conduce to the betterment of the system, as its enforcement would build up some of the scantily attended schools, relieve some of the overcrowded buildings, economize the space provided for school purposes, and improve the discipline of the schools by preventing dissatisfied pupils from wandering at will from school to school throughout the city, but so little regard is paid to this rule that little, if any, good has resulted since its adoption. No one but a parent, who realizes his mistake too late to prevent injury to his child's whole life, or a teacher who too frequently has to witness the injury done the young by the injudicious indulgence of their supposed friends, appreciates the importance of not allowing pupils to change school, except for good and satisfactory reasons. It is the duty of the authorities to make no laws but those that are to be enforced. Whenever it becomes necessary to investigate a pupil's request to be allowed to leave one school to go to another, the circumstances should be investigated; if the school is at fault, correct it, and render the transfer unnecessary. This matter is worthy of careful thought. The destruction of one child's happiness and usefulness, of the sixty thousand who attend our schools, by unwise management, is a grave blunder, and worthy men will use their best efforts to prevent it.

PRINCIPALS AND TEACHERS.

A corps of teachers must be imbued with professional spirit, with a desire to know what has been done and what is being done in the educational world,—the mistakes that have been made that they may be avoided, and the success that has been won that the steps may be pursued by which it was attained. Armed with the best ideas which can be gotten through the study of the history and science of education, a knowledge of the subjects embracing far more than simply what they have to teach, and the experience they are daily acquiring in the discharge of their duties, it must be their aim to adopt the most suitable means for securing the best results. They must learn that education is the training of the powers of the mind and heart, and incidentally the acquisition of knowledge; that it does not consist in learning verbatim and undigestedly what is put down in text-books; that pupils properly instructed acquire a knowledge of their environment, and that they are best educated when fitted to take their place in the walks of life, and to fill it with advantage and happiness to themselves and to the betterment of the community in which they reside. In addition to the duty of instructing a class, usually a small one, and when large requiring the assistance of another teacher, the principal is required under the rules of the Board to supervise his school in order to see that the assistant teachers are performing their duty so that the school

is doing its work efficiently. Where this important part of the principal's duty receives the attention and exercise of intelligent advice and judgment its importance demands, the school is found to be progressive and daily increasing in efficiency and usefulness. In the schools in which this duty is neglected, or in which it is performed unintelligently or perfunctorily by the principal, the school is not increasing in efficiency or doing its work with the greatest amount of good to the children. It is gratifying to say that this part of the principal's duty, certainly the most important duty devolving upon him, is receiving more attention than was formerly the case, and in consequence improvement in the work of the schools is the result.

A knowledge of the schools, derived from acquaintance with the teachers and through my visits and examination of the classes, enables me to say that the effect of this increased attention given to the supervision of their classes on the part of principals is doing a great deal towards improving the teachers and increasing the efficiency of the schools. Each teacher's work needs overlooking by the principal, who should advise, assist and direct his teachers, so that the work of the school may progress harmoniously and effectively. The amount of consideration the teachers were compelled to give to the preparation of the work of their classes for exhibition at Chicago, in order that the exercises prepared for display might show that

good work was being done by the use of intelligent methods, was of decided advantage to the schools. A great many of the teachers are students, not only of the branches of study pursued in the schools, but also of good educational literature. The grade meetings held during the year have also been productive of improvement to the teaching force. Instead of studying the abstract and metaphysical treatises on psychology and pedagogy prepared for the use of teachers, I have endeavored to get the teachers to master the elements of algebra and geometry, to read carefully the lives of some of the great educational reformers, to familiarize themselves with the history of Maryland and the United States, to study a good text-book on physical geography, to endeavor to learn some branch of science so as to be able to teach their classes elementary science by the objective method, and to study critically one work at least of some first-class writer so as to become acquainted with his style, period and contemporaries. A knowledge of algebra and geometry is indispensable to an intelligent understanding of arithmetic, and when the teacher is proficient in these branches her arithmetical instruction will be based on the correct method of procedure. An acquaintance with the lives and work of eminent teachers, who have arisen from time to time to protest against *memoriter* teaching, and to demand that studies shall be correlated and taught largely through the study of things, so as to develop in their order and to strengthen

the innate powers of the mind, can but have a most fruitful influence upon the work of anyone engaged in teaching.

An intimate acquaintance with the exploration, colonial, revolutionary and constitutional periods of the history of our country, and something of the history of the foreign countries with which our history is connected, are necessary for the teacher who is to interest her pupils in the history of the United States, create in the children a love of country, and acquaint them with the deeds of some of its most prominent men. Since the study of physical geography encroaches to a greater or less degree upon the domain of all the branches of science, a working knowledge of this subject is most serviceable to the teacher of elementary science, and this knowledge is indispensable to the teacher of geography in enabling her to explain to her pupils the Solar system, the movements of the earth, the zones, the atmosphere, tides, climate, streams and mountains, and the forms and distribution of plant and animal life. The careful study of some one work, at least, of a first-class writer, with a knowledge of his times, his style of writing and contemporaries, would tend greatly to give the teacher the right point of view when she is instructing her class in reading and language, which would enable her to get her pupils to acquire a taste for good reading and an increasing knowledge of the literature and good usage of their language.

A teacher who endeavors to improve herself industriously and intelligently on these lines cannot fail to become able in time to do her work in the most satisfactory manner. The public school library is becoming more and more a source of benefit to the teachers and the schools. In future, in adding to the library, it is recommended that from ten to a dozen copies each of the lives of the most celebrated educational reformers be purchased, as they are very frequently called for, and this number of copies is necessary to meet the demands on the library made by the teachers for this kind of educational literature. The abolition of written examinations for promotion, and basing the qualifications for promotion upon the judgment of the teacher, has had a decidedly beneficial effect in improving the methods of the teachers and in enabling them to do better work. This plan gives opportunity for the necessary amount of oral instruction, and leaves the question of fitness for promotion with the teacher, who is required to use correct methods of teaching and to judge correctly as to the preparation of the pupil to undertake the work of the next grade. The teacher, instead of being a part of a vast educational machine run on schedule time, is given the opportunity to adapt her plans to the situation in which she is placed, and to use such methods as will result in the greatest amount of good. Her methods of teaching and of providing for the needs of her class are no longer dominated by the requirements of written examinations, sent from

the office as tests of qualification for promotion—the teacher has been emancipated from the slavery brought about by the old plan, and she is free to prepare herself thoroughly for her work, and is encouraged to perform her duties so that her pupils shall daily grow stronger in mental power and good habits of body, mind and heart. The strong recommendation for this plan is the improvement it brings about among the teachers, and as a necessary consequence the strengthening of the work of the schools.

THE CERTIFICATION AND PROMOTION OF TEACHERS.

Your attention is again called to this important subject. According to the rules, as they stand now, regulating the eligibility and promotion of teachers, all the teachers in the schools who have served for ten years are declared to be eligible, if selected for promotion, to any position in a primary or a grammar school; those who pass the semi-annual examinations of applicants for certificates to teach, are declared eligible for ten years to any position in a primary or a grammar school; and the graduates of the College, the High Schools, and the State Normal School, who obtain a fixed average, are made eligible for ten years to any position in a primary or a grammar school. It is easy to see how the operation of these rules makes many persons eligible to the most responsible positions in the schools, for which they may be totally unfitted, either from a lack of experience in teaching or of a competent knowledge

of the branches they would be called upon to teach, and at times on both of these accounts. By their operation persons may be selected to teach branches which they have given the Board no evidence that they understand themselves. What guarantee has the Board that teachers examined upon the merest elements of arithmetic, grammar and geography, as most of the teachers were at the time they entered the schools, are scholastically qualified to teach history, algebra, elementary science and geometry, which are required by the course of study to be taught in the upper grammar grades? Under the old rules of the Board, applicants for certificates to teach were certificated according to the degree of the difficulty of the examination they passed, as: second assistant of a grammar or a primary school, principal of a primary or a colored school, first assistant of a female grammar school, first assistant of a male grammar school, principal of a female grammar school, and as principal of a male grammar school. Under the operation of these requirements many teachers came forward voluntarily to give evidence to the Board that they were qualified scholastically to be promoted, and many of these secured higher positions and are at this time numbered among the best teachers in the schools. It is recommended, in this connection, that after securing the lowest place in the primary or grammar schools by one of the means now in vogue, that is to say, by examination, or graduation with the requisite average, that further claims to eligibility, and

promotion to higher positions, be based on passing suitable examinations arranged for each position. I am quite sure that such a method of fixing the degree of eligibility of teachers would not only stimulate the teaching force generally to study, secure better promoted teachers, and greatly improve the school system, but also, that its adoption would be highly gratifying to a large number of our best and most experienced teachers, who would thus be enabled to see that there is an equal chance for all, and that eligibility for promotion is based, as it should be, both in the interests of the teachers and the schools, on merit alone. In case these recommendations were adopted, promotions would almost regulate themselves, as little mistake could be made in selecting for promotion any one from the list of those who had shown the Board, by successful experience in the schools and by passing the requisite examination, that she possessed the necessary qualifications to fill the position. The stimulus to study this system would give the teaching force is acknowledged to be a necessary and most important means of keeping up its tone and efficiency. No officer in the army or navy, or employé in the civil service, can be promoted from a lower to a higher position without showing by an examination that he has by study and attention to duty made himself competent to be promoted to the next higher grade. There is coming more and more into vogue also, another way of getting names on the list of eligibles, that is, by sus-

pending the rules of the Board and declaring by vote that a certain person's name is placed upon the list of eligibles. Fairness to other applicants, and the highest interests of the school system and of the community, demand that all applicants shall become eligible for entrance into the schools and for promotion, in accordance with certain discriminative requirements, tested by suitable examinations, and that in securing a place upon the list of eligibles, fairness, to say the least, demands that what is required of one person shall be required of all, and what is granted to one shall be granted to all. The rules passed in April, 1887, making those eligible who graduate from the College, High Schools and State Normal School with the requisite average, and those who pass the semi-annual examination, eligible for ten years, were regarded as a step in advance, and as increasing the requirements of persons declared eligible to teach, but the amendments to the rules, made since that time, making all teachers who have been in the schools ten years, if selected for promotion, eligible to any position in a primary or grammar school, making persons who have honorably left the service eligible at any time to the position of second assistant in a primary or grammar school, and the frequent suspension of the rules to allow the names of applicants to be placed upon the list of eligibles without complying with the rules relating to the eligibility of candidates, neutralize in a great measure their good effect, and in fact make the standard of eligibility lower than it was before the adoption of the rule in 1887.

THE WORLD'S FAIR EXHIBIT.

This report would be incomplete without some mention of the work of the schools prepared for exhibition at the World's Columbian Exposition held at Chicago. The exhibit consisted of written exercises and specimens of work in the various branches of study taught in the schools: arithmetic, composition or language, history, geography, grammar, penmanship, drawing, modeling, sewing, physiology, elementary science, maps, algebra, geometry, observation lessons, paper-folding and cutting, etc. The exercises under these heads were prepared to represent and illustrate what was done in the schools in carrying out the requirements of the course of study. They consisted of ordinary every-day lessons, provided such lessons were typical or representative lessons, tests in review matter, suggestive lessons in methods of teaching, illustrative lessons where aids, contrivances or appliances are used, or any lessons, methods, schemes, exercises or work which the teachers and principals considered suitable. The exercises upon each subject of a class were accompanied by a preface, written by the teacher, to explain what the class papers illustrated, the requirements of the course of study relative to the grade from which the exercises were received, also what the general method of the teacher had been and in what way the exhibited work illustrated the method pursued and its purpose. These exercises when bound constituted fifty-six volumes of written matter, nineteen of

which contained the exercises of the high school pupils, twenty volumes those of the grammar school pupils, four those of the pupils of the English-German schools, and thirteen the work of the pupils of the primary schools. The exhibit of the Polytechnic Institute was prepared separately under the direction of the committee on this school. Besides these volumes of written work there were maps, drawings, photographs of interior and exterior views of buildings, photographs of class-rooms showing the pupils engaged in their work, models, sewing, paper-folding, color-work and devices for teaching. Those charged with selecting, arranging and putting the work in condition favorable for its display labored under great disadvantages on account of the limited amount of money placed at their disposal, and also on account of the lack of sufficient time and force to accomplish the task as it should have been. There was not enough money to frame the greater number of the drawings and maps, and consequently they had been on exhibition only a few days before they became soiled, warped and unsightly. The amount of space set apart for the Baltimore city schools was largely increased at the last moment, as a considerable portion of the space allotted to the state of Maryland was given to the city of Baltimore when it was ascertained that the other schools of the state had determined not to make an exhibit. The city's exhibit arranged for less space was, consequently, spread out over a larger amount of space than it was prepared

to occupy, which detracted materially from its appearance. After the arrival of the exhibit at Chicago, the limited amount of funds at our disposal and the lack of the necessary time and force to place the exhibit so as to show it to advantage, left it in a condition which detracted greatly from its general appearance and effect, yet the character of the work, in the estimation of one competent to judge, gave it a place among the best work on exhibition, and, although we labored under the disadvantages mentioned, it may be said that the exhibit was highly creditable to the schools.

There is no doubt that the amount of effort and thought given by the schools to the preparation of this exhibit exercised a most beneficial influence on the teachers and the schools. Evidences of the truth of this statement are apparent throughout the schools, and this leads me to suggest that it would be highly beneficial to the schools if we could have a suitable place for the purpose, and make an annual exhibit of the work that is done in the schools. Not only would such a display of what we are doing in the schools stimulate and improve the teachers by enabling all of them to see exactly what their co-laborers are doing and to compare it with what they themselves are accomplishing, but it would afford an opportunity to the public also to see the condition of our system of public education and the progress the schools are making. I am satisfied that the improvement to the

schools effected by means of such a yearly exhibit of their working and progress would more than compensate for the time required for its preparation and the money used to defray its expense.

COOKING.

Cooking schools have been successfully established as a part of the school system of many of the large cities of this country, and instruction in domestic economy is systematically given in most of the schools of Europe in which girls are taught, such instruction being considered quite as necessary for the girls as manual training for the boys. The claims for this instruction are not based alone on the importance of teaching girls how to cook, but that it has a high educational value, and that when given, as it should always be, upon a scientific basis, it furnishes a feature of intellectual training of prime importance. The instruction is based as far as possible on scientific principles and is pursued in connection with the lessons on elementary science, which are now given in most of the schools. The necessity for teaching the laws of sanitation is recognized in the endeavor to introduce lessons in hygiene and temperance into the course of instruction pursued in the public schools. When this instruction in science is given in connection with what is taught in the cooking school, they supplement and illustrate each other, and really constitute, one the theory and the other the

practical application of the laws of hygiene, and much more intelligent and useful instruction is the result. A committee of generous and public spirited ladies in charge of a cooking school already established in South Baltimore, in the autumn of 1892 asked permission of the School Board to give notice in the public schools in the vicinity of No. 1010 Light street, that free instruction in cooking after school hours would be given to a limited number of pupils once a week. Forty girls of the seventh and eighth grades accepted, and the experiment proved so satisfactory that in the spring of 1893 the proposition was made to the School Board "to give free instruction in cooking for one year to one hundred girls, one hour a week each, from the grammar schools." The ladies state that, as for several years there have been evidences of a desire on the part of the public of Baltimore that the girls attending the schools might be given instruction in cooking, the offer was made in the hope that the School Board would see the advantage of this study and introduce it the following year into the public school system. A committee appointed by the Board to consider the subject reported in favor of accepting the proposal and introducing cooking into the seventh and eighth grades of the schools in the neighborhood of the cooking school, and adopted the following resolution:

Whereas, A committee of ladies in charge of a cooking school now established at Friends' Mission Church, No. 1010 Light street, have proposed to this Board to train, without any charge, one hundred pupils of the

seventh and eighth grades of the grammar schools in the art of cooking, giving one lesson per week to each girl at the Friends' Mission during the winter of 1893-'94; therefore,

Resolved by this Board, That the proposition and request aforesaid be accepted; that the Superintendent of Public Instruction be and he is hereby authorized and directed under such rules and regulations as he may deem best to carry said proposition into effect, and after consultation with the principals of the various neighboring grammar schools and after obtaining the consent of the parents of such pupils as may attend, to assign from the seventh and eighth grades one hundred pupils to attend the cooking school one hour per week during the winter of 1893-1894, in sections or in numbers, and in such manner as may interfere least with the other studies in said schools.

In compliance with these directions, after conferring with the President of the Board, the local committees on Female Grammar Schools No. 4 and No. 10, and also with the principals of these schools, who secured the willing consent of the parents, nine classes, composed of one hundred and twenty, seventh and eighth grade pupils of these schools, were organized, and began work on the 25th of November, 1893.

I am fully satisfied that instruction in cooking is a valuable part of the work of the schools, and that its introduction throughout the system is most desirable as it would add to their efficiency and usefulness.

The cooking school is in charge of Miss Grace E. McCullough, who is a graduate of the Washington School of Cookery, and who has gone through the course in the Diet Kitchen of the Johns Hopkins Hospital.

Miss McCullough sends me the following statement:

The method employed is simple, yet thorough, the girls doing every detail of the work themselves, which gives familiarity and exactness in measurements, deftness in the handling of utensils and raises the idea of work. The application of science to daily needs means the education of the masses and dignifies labor; so it is with cooking when to it are applied the principles of chemistry, the nutritive value of foods, physiological conditions, the laws of hygiene and the knowledge of biology, which necessitate absolute cleanliness and tell of evils lurking in the pantry. Therefore, with each lesson is given a talk upon the materials used, as much practical science as the subject warrants, economy both in money and vital energy, healthfulness clearly set forth in the advantages accruing from a mixed diet. Object lessons in samples of the raw materials and blackboards, charts, &c., are used. The market price is given, and comparisons made between value paid and value received in the nutritive properties of foods. Frequently lessons in geography and botany are given in explaining the history, growth and cultivation of many food stuffs. A lesson in dictation is also a part, as the recipe is required to be written for future reference, and two questions each day with special bearing upon the previous lesson. No text-book is used, but the endeavor is to cull the best from many existing systems in order to combine practice with theory. A definite course is followed, in which the lessons are dependent on each other. Only plain, wholesome food has been attempted, except in the request for plum-pudding for the Christmas feast, and the reports of that deviation prove its policy. The attendance and deportment are excellent: a happy, enthusiastic expression does each girl bring with her to the kitchen, which is very encouraging. The committee feels the importance of this work, not only for the poor, but for the rich, in order to train the present generation of girls to become efficient in their homes, whether compelled to do their own work or guide others. Cleanliness, thrift, self-control, order and judgment are needed to form happy homes; so that, apart from the educational advantages of a knowledge of cooking, its value in the formation of a well-organized household can hardly be over-estimated.

SEWING.

Instruction in sewing is given to the girls in the third grade of the primary schools, and to those of the fourth, fifth, sixth, seventh and eighth grades of the

grammar schools. The instruction is given by fourteen special teachers, under the supervision of a directress of sewing. Thirteen thousand six hundred and fifty-seven pupils are taught this branch, each of whom receives an hour's lesson, once a week. The reports received from the principals and teachers generally, speak very decidedly in favor of the very great advantage this instruction is to the girls, and of its good effect upon the other work of the school. It is claimed, by some of the principals and teachers, that since the introduction of sewing into the schools, the interest of parents in the work of the schools has increased, better attendance has been secured, the girls have become neater, more orderly, and that more interest has been awakened in the other studies pursued in the schools.

Miss Laura V. Davis, Directress of Sewing, makes the following report:

Manual training is coming into greater prominence every day, and the art of sewing is considered one of woman's duties. Such a course tends not only to train the hand and eye, but to develop, strengthen and mature the mind and judgment. Starting with the first year, the explanation and mastering of the different stitches used in plain sewing have been the main feature. I advise the drawing of different designs on practice cloth, such as are taught in drawing lessons, the pupils outlining them in stitching, back-stitching and running. Sewing and drawing help each other in comparing the directions of stitches to lines. The explanation of the inch measure used in the measurement of stitches, folds, distances, &c., in sewing helps the arithmetic, in the division of a whole into parts or fractions, so the effect of one is seen in the other. We are about to begin instruction in the third grade. The reports from the sewing teachers who have visited the schools are that the children and many of the teachers speak favorably of its introduction. I shall give the whole of my time in

the future to the supervision of the work, as the committee on sewing has directed. I find by results that the sewing teachers have spared no pains in the discharge of their duty. Many of the regular teachers show an increased interest in the work, which I am pleased to note.

Your attention is called to the report of the Assistant Superintendent herewith submitted, which gives an account of the condition and needs of the primary schools, and also to the reports of the Principal of Baltimore City College, the Eastern Female High School, the Western Female High School and the Polytechnic Institute for information in regard to the condition and needs of those schools.

It affords me pleasure to say that the teachers have been faithful in the discharge of their duties, that many of them are zealously endeavoring to become better qualified for their work, and that my thanks are due them for their hearty co-operation with me in my efforts to improve the schools.

Thanking you, gentlemen, and the officers of the Board for your kindness and courtesy, I am,

Very respectfully,

HENRY A. WISE,

Superintendent.

Tables Accompanying the Superintendent's Report.

TABLE A.

Statement showing the number of male and female teachers, and the number of pupils on roll December, 1893; the average number of pupils on roll during the year; the average attendance for the year; the percentage of attendance for the year, and the number in school during the year.

Schools.	Teachers		Number of Pupils.					
	Males.	Females.	On roll December, 1893.	Average roll for the year.	Average attendance for the year.	Percentage of attendance.	Whole number in school during the year.	In school during the year, excluding duplicate enrollments.
Baltimore City College.....	15	.....	539	465	431	92	725	479
East. Fem. High Sch.....	1	12	446	423	394	93	584	438
West. Fem. High Sch.....	1	13	530	472	442	93	735	490
Totals.....	17	25	1,515	1,360	1,267	93	2,044	1,407
Balto. Polytechnic Inst....	18	.....	486	405	383	94	742	552
Col. Man'l Train'g School.	6	.....	87	83	70	84	139	110
Totals.....	24	.....	573	488	453	93	881	662
Male Grammar No. 1.....	2	6	317	288	264	92	429	326
" " " 2.....	2	8	420	399	360	90	564	429
" " " 3.....	2	3	114	104	89	86	171	120
" " " 4.....	2	4	241	220	203	92	320	258
" " " 5.....	1	5	226	208	186	89	325	232
" " " 6.....	2	9	437	415	381	92	607	468
" " " 7.....	2	6	315	270	249	92	412	282
" " " 8.....	2	7	375	351	313	89	547	413
" G. & P. " 9.....	1	4	133	137	107	79	217	210
" Grammar " 10.....	2	7	354	307	283	92	448	317
" " " 11.....	2	5	245	242	223	92	370	264
" " " 12.....	-	6	327	305	281	92	471	341
" " " 13.....	1	4	152	148	136	91	210	164
" " " 15.....	2	10	436	438	396	90	648	504
" " " 16.....	1	8	358	329	276	84	443	436
" " " 17.....	2	5	247	230	208	90	329	250
" " " 18.....	2	3	209	207	179	86	319	137
" " " 19.....	1	9	412	387	348	90	571	456
" " " 20.....	2	9	433	401	362	90	579	455
" " " 21.....	2	8	374	431	390	90	624	514
" " " 22.....	1	5	230	229	205	89	244	15
Totals.....	36	131	6,355	6,046	5,439	90	8,848	6,591

TABLES ACCOMPANYING THE SUPERINTENDENT'S REPORT.

TABLE A—Continued.

SCHOOLS.	Teachers		Number of Pupils.					
	Males.	Females.	On roll December, 1893.	Average roll for the year.	Average attendance for the year.	Percentage of attendance.	Whole number in school during the year.	In school during the year, excluding duplicate enrollments.
Female Grammar No. 1.	.....	9	360	357	302	85	510	408
" " " 2.	.....	11	435	402	347	87	575	427
" " " 3.	.....	5	140	139	113	81	213	160
" " " 4.	.....	6	233	219	195	88	322	255
" " " 5.	.....	7	275	267	224	83	391	303
" " " 6.	.....	12	506	490	430	88	717	543
" " " 7.	.....	8	318	294	265	90	440	330
" " " 8.	.....	11	435	405	348	86	592	445
" G. & P. " 9.	.....	5	133	136	110	81	197	192
" Grammar " 10.	.....	10	387	351	323	92	503	386
" " " 11.	.....	9	379	340	296	87	501	369
" " " 12.	.....	7	278	246	218	89	390	267
" " " 13.	.....	6	252	233	207	89	336	250
" " " 15.	.....	16	533	593	522	88	874	737
" " " 16.	.....	9	373	355	280	79	467	457
" " " 17.	.....	7	262	245	220	90	365	273
" " " 18.	.....	8	312	208	181	87	483	191
" " " 19.	.....	11	456	411	350	86	623	450
" " " 20.	.....	14	551	515	452	80	712	547
" " " 21.	.....	11	466	544	466	85	779	653
Totals	.....	182	7,084	6,750	5,849	87	10,390	7,643
English-German No. 1.	.....	3	12	501	533	479	90	720	685
" " " 2.	.....	2	26	1,032	1,023	940	92	1,343	1,303
" " " 3.	.....	4	31	1,562	1,499	1,354	90	2,007	1,950
" " " 4.	.....	3	30	1,372	1,316	1,186	90	1,708	1,633
" " " 5.	.....	3	21	1,026	969	842	86	1,331	1,275
Totals	.....	15	120	5,493	5,340	4,801	90	7,109	6,846

TABLES ACCOMPANYING THE SUPERINTENDENT'S REPORT.

TABLE A—Continued.

SCHOOLS.	Teachers		Number of Pupils.					
	Males.	Females.	On roll December, 1893.	Average roll for the year.	Average attendance for the year.	Percentage of attendance.	Whole number in school during the year.	In school during the year, excluding duplicate enrollments.
Male Primary No. 1	.....	9	321	319	268	84	517	474
" " " 2	.....	5	208	197	165	84	319	313
" " " 3	.....	9	357	339	282	83	526	492
" " " 4	.....	7	265	237	214	90	397	384
" " " 5	.....	12	468	453	379	84	626	582
" " " 6	.....	10	405	401	376	94	566	553
" " " 7	.....	6	226	225	177	79	304	293
" " " 8	.....	5	202	191	150	79	290	273
" " " 10	.....	6	223	228	183	80	348	325
" " " 11	.....	14	570	564	472	84	848	786
" " " 12	.....	9	393	374	299	80	532	509
" " " 13	.....	5	176	175	132	75	252	238
" " " 14	.....	8	320	325	274	85	469	443
" " " 15	.....	10	368	381	320	83	540	499
" " " 16	.....	7	249	255	203	79	393	266
" " " 17	.....	8	291	290	246	83	400	389
" " " 18	.....	6	204	208	187	90	305	275
" " " 19	.....	4	155	132	113	86	235	213
" " " 20	.....	19	723	662	605	92	958	882
" " " 21	.....	8	347	349	281	81	503	464
" " " 22	.....	10	418	398	334	83	595	568
" " " 23	.....	9	372	358	312	87	545	505
" " " 24	.....	13	532	509	433	85	708	681
" " " 25	.....	7	276	261	223	85	374	359
" " " 26	.....	6	224	219	188	86	336	298
" " " 27	.....	8	374	365	316	86	544	512
" " " 28	.....	8	306	275	245	89	402	363
" " " 29	.....	5	193	158	137	87	249	230
" " " 30	.....	14	606	588	481	82	876	811
" " " 31	.....	6	196	223	177	80	330	315
" " " 32	.....	8	286	290	251	86	411	386
" " " 33	.....	11	433	422	378	90	596	587
" " " 36	.....	4	195	171	144	84	236	82
" " " 37	.....	4	148	143	119	83	156	51
Totals	.....	280	11,030	10,685	9,064	85	15,636	14,401

TABLES ACCOMPANYING THE SUPERINTENDENT'S REPORT.

TABLE A—Continued.

SCHOOLS.	Teachers		Number of Pupils.					
	Males.	Females.	On roll December, 1893.	Average roll for the year.	Average attendance for the year.	Percentage of attendance.	Whole number in school during the year.	In school during the year, excluding duplicate enrollments.
Female Primary No. 1	.....	9	324	326	267	82	481	443
" " " 2	.....	6	259	244	203	84	395	378
" " " 3	.....	8	347	324	239	74	498	474
" " " 4	.....	6	223	223	190	85	328	310
" " " 5	.....	12	446	439	349	80	651	619
" " " 6	.....	10	405	410	368	90	561	545
" " " 7	.....	6	236	219	178	82	330	320
" " " 8	.....	5	213	221	176	78	329	313
" " " 10	.....	6	217	212	175	87	315	216
" " " 11	.....	12	507	480	386	80	731	683
" " " 12	.....	10	424	400	338	85	572	549
" " " 13	.....	5	175	185	149	81	259	249
" " " 14	.....	7	310	317	257	82	455	436
" " " 15	.....	10	374	369	302	82	548	505
" " " 16	.....	6	210	210	171	81	334	313
" " " 17	.....	8	319	310	251	81	443	425
" " " 18	.....	6	232	245	200	82	358	329
" " " 19	.....	3	126	120	106	88	210	187
" " " 20	.....	15	602	584	481	82	858	790
" " " 21	.....	7	286	283	232	82	438	419
" " " 22	.....	9	403	359	289	80	540	510
" " " 23	.....	9	359	349	299	86	542	504
" " " 24	.....	13	568	528	432	82	719	699
" " " 25	.....	6	289	260	207	80	376	352
" " " 26	....	6	224	226	194	86	332	318
" " " 27	.....	9	382	377	317	85	561	527
" " " 28	.....	8	316	295	257	87	398	385
" " " 29	.....	4	162	145	118	82	227	222
" " " 30	.....	12	509	500	394	79	755	708
" " " 31	.....	6	207	211	167	79	302	290
" " " 32	.....	7	266	276	221	80	418	386
" " " 33	.....	10	391	362	309	85	491	478
Totals	.....	256	10,311	10,009	8,222	82	14,753	13,882

TABLES ACCOMPANYING THE SUPERINTENDENT'S REPORT.

TABLE A—Continued.

SCHOOLS.	Teachers		Number of Pupils.					
	Males.	Females.	On roll December, 1893.	Average roll for the year.	Average attendance for the year.	Percentage of attendance.	Whole number in school during the year.	In school during the year, excluding duplicate enrollments.
High & Gram. Col. No. 1.	2	12	579	508	447	88	745	558
Grammar Colored " 2.	2	3	191	166	138	84	269	192
" " " 3.	1	6	268	239	206	86	364	253
Male Colored No. 1.....	1	5	230	221	156	71	366	355
" " " 2.....	1	6	289	270	205	76	370	355
" " " 3.....	2	8	401	366	320	87	504	502
" " " 4.....	2	8	450	436	322	74	577	567
" " " 5.....	1	3	126	116	91	78	161	161
" " " 6	2	4	271	248	195	79	351	348
" " " 7.....	2	9	377	321	268	83	539	522
" " " 8.	1	7	285	286	230	80	405	390
" " " 9.....	7	5	559	499	415	83	763	754
Female " " 1.....	.....	9	402	351	256	72	565	549
" " " 2.....	.....	7	270	266	192	72	358	357
" " " 3.....	.....	10	427	382	306	80	537	532
" " " 4.....	.....	10	418	419	317	76	559	549
" " " 5.....	.....	4	186	163	118	72	247	245
" " " 6.....	.....	6	278	249	181	73	370	366
" " " 7.....	.....	16	661	634	468	74	944	935
" " " 8.....	.....	9	322	313	238	76	458	454
" " " 9.....	.....	12	549	491	383	78	752	730
Totals	24	159	7,539	6,944	5,452	78	10,204	9,374

TABLES ACCOMPANYING THE SUPERINTENDENT'S REPORT.

TABLE A—Contiuued.

SCHOOLS.	Teachers		Number of Pupils.					
	Males.	Females.	On roll December 1893.	Average roll for the year.	Average attendance for the year.	Percentage of attendance.	Whole number in school during the year.	In school during the year, excluding duplicate enrollments.
Annex No. 1	.....	7	272	251	203	83	350	333
" " 2	1	17	806	754	629	85	1,009	888
" " 3, Male	1	4	152	126	104	83	223	157
" " 3, Female	.....	5	173	167	136	81	273	201
" " 4	.....	9	375	379	291	77	621	592
" " 5	.....	7	315	300	251	84	454	409
" " 6	1	6	290	248	210	85	381	269
" " 7	1	9	440	395	339	86	580	539
" " 8	1	12	605	505	395	78	794	689
" " 9	1	5	274	268	204	76	357	344
" " 10	1	2	117	110	96	87	155	126
" " 11	1	9	463	414	356	86	535	497
" " 12	4	14	761	692	618	90	920	867
" " 13	.....	20	785	754	564	75	1,095	995
" " 14	.....	2	57	50	39	78	80	76
" " 15	1	2	99	102	91	89	111	43
" " 34, Male	.....	6	267	251	217	87	410	380
" " 34, Female	.....	7	272	229	195	85	398	368
" " 35	.....	4	174	158	131	83	229	218
" " 1, Colored	.....	3	106	98	63	64	155	154
" " 3, "	.....	3	126	93	59	63	165	162
" " 10, "	2	3	219	149	108	72	313	312
Totals	15	156	7,148	6,543	5,299	81	9,608	8,619

TABLES ACCOMPANYING THE SUPERINTENDENT'S REPORT.

TABLE A—Continued.

NIGHT SCHOOLS.	PERIODS OPEN.	Number of schools December, 1893.	Number Teachers.				Number of Pupils.			
			Males, December, 1893.	Females, December, 1893.	Totals, December, 1893.	Average number for the periods open.	On roll December, 1893.	Average roll for the periods open.	Average attendance for the periods open.	Percentage of attendance for the periods open.
Male Polish	Oct. 30–Dec. 22	1	4	0	4	4	186	193	129	61
Female "	Nov. 6–Dec. 22	1	2	1	3	3	177	136	84	62
Bohemian	Dec. 4–Dec. 22	1	1	5	6	6	180	180	152	84
No. 1	Jan. 2–March 18; Dec. 4–Dec. 22	1	1	1	2	$2\frac{6}{7}$	78	62	40	64
" 3	Jan. 2–March 18	0	0	0	0	3	0	91	59	64
" 5	Dec. 4–Dec. 22	1	1	2	3	3	100	100	78	78
" 6	Jan. 2–March 18; Dec. 4–Dec. 22	1	2	0	2	$3\frac{5}{7}$	65	78	54	69
" 8	Jan. 2–March 18	0	0	0	0	$2\frac{1}{2}$	0	67	34	51
" 11	Jan. 2–March 18	0	0	0	0	$5\frac{1}{3}$	0	175	93	53
" 12	Dec. 4–Dec. 22	1	2	1	3	3	126	126	97	77
" 17	Jan. 2–March 18; Dec. 4–Dec. 22	1	3	1	4	$6\frac{4}{7}$	200	164	95	58
" 24	Jan. 2–March 18	0	0	0	0	$4\frac{1}{8}$	0	70	46	66
" 1, Colored	Jan. 2–March 18; Dec. 4–Dec. 22	1	1	0	1	$4\frac{3}{7}$	44	195	92	47
		9	17	11	28	$51\frac{9}{42}$	1156	1637	1053	64
Poly. Institute (Post Graduate)	Oct. 4–Dec. 22	1	4	0	4	4	46	49	36	73
Totals		10	21	11	32	$55\frac{9}{42}$	1202	1686	1089	65

TABLES ACCOMPANYING THE SUPERINTENDENT'S REPORT.

TABLE A—CONCLUDED—RECAPITULATION.

SCHOOLS.	Number of schools December, 1893.	NUMBER OF TEACHERS.				NUMBER OF PUPILS.					
		Males, December, 1893.	Females, December, 1893.	Totals, December, 1893.	Average for the year.	On roll, December, 1893.	Average roll for the year.	Average attendance for the year.	Percentage of attendance.	Whole number in school during the year.	In school during the year, excluding duplicate enrollments.
Baltimore City College	1	15	.....	15	15	539	465	431	92	725	479
Eastern Female High School	1	1	12	13	12	446	423	394	93	584	438
Western Female High School	1	1	13	14	13	530	472	442	93	735	490
Polytechnic Institute	1	18	.....	18	16	486	405	383	94	742	552
Colored Manual Training School	1	6	.....	6	5	87	83	70	84	139	110
Male Grammar Schools	21	36	131	167	160	6,355	6,046	5,439	90	8,848	6,591
Female Grammar Schools	20	.....	182	182	178	7,084	6,750	5,849	87	10,390	7,643
English-German Schools	5	15	120	135	133	5,493	5,340	4,801	90	7,109	6,846
Male Primary Schools	34	.....	280	280	266	11,030	10,685	9,064	85	15,636	14,401
Female Primary Schools	32	.....	256	256	250	10,311	10,009	8,222	82	14,753	13,882
Colored Schools	21	24	159	183	179	7,539	6,944	5,452	78	10,204	9,374
Annex Schools	22	15	156	171	158	7,148	6,543	5,299	81	9,608	8,619
Special Teachers { Music	.....	2	.....	2	2	.....	.....	.....	.....	.....	.....
Special Teachers { Drawing	.....	.....	11	11	11	.....	.....	.....	.....	.....	.....
Special Teachers { Sewing	.....	.....	11	11	11	.....	.....	.....	.....	.....	.....
Totals	160	133	1,331	1,464	1,409	57,048	54,165	45,846	85	79,473	69,425
Night Schools	10	21	11	32	* 56	1,202	* 1,686	* 1,089	* 65	.....	.....

* These figures are for the periods the night schools were open.

TABLES ACCOMPANYING THE SUPERINTENDENT'S REPORT.

TABLE B.

DIFFERENT GRADES OF SCHOOLS COMPARED.

Number of pupils in B. C. C. and High Schools,	1893	1,515	
" " " "	1892	1,367	
Increase			148
Number of pupils in Polytechnic Schools,	1893	573	
" " "	1892	478	
Increase			95
Number of pupils in Grammar Schools,	1893	13,439	
" " "	1892	12,829	
Increase			610
Number of pupils in English-German Schools,	1893	5,493	
" " " "	1892	5,439	
Increase			54
Number of pupils in Primary Schools,	1893	21,341	
" " "	1892	20,764	
Increase			577
Number of pupils in Colored Schools,	1893	7,539	
" " "	1892	7,283	
Increase			256
Number of pupils in Annex Schools,	1893	7,148	
" " "	1892	6,246	
Increase			902
Total increase			2,649

TABLES ACCOMPANYING THE SUPERINTENDENT'S REPORT.

TABLE C.

Showing the Number of Pupils and Teachers in the Public Schools on roll at the time of making the report each year, from the year 1829, when the first Public School was opened, to the year 1893, inclusive.

This statement does not include Evening Schools, Normal Classes, nor Floating Schools.

The figures for 1888, and subsequently, include the Annex Schools.

Date.	Teachers.	Pupils.	Date.	Teachers.	Pupils.
1829	3	269	1862	311	13,888
1830	5	402	1863	333	14,847
1831	5	627	1864	343	15,319
1832	5	640	1865	366	15,957
1833	5	544	1866	402	17,550
1834	8	859	1867	490	22,073
1835	8	747	1868	537	21,903
1836	8	814	1869	540	23,552
1837	8	659	1870	549	23,898
1838	8	675	1871	559	24,479
1839	16	1,126	1872	581	25,092
1840	22	1,834	1873	588	26,663
1841	27	2,331	1874	626	27,634
1842	28	2,464	1875	672	29,942
1843	30	2,669	1876	717	31,071
1844	38	3,366	1877	734	32,523
1845	52	4,313	1878	784	34,002
1846	65	5,087	1879	798	35,595
1847	90	6,439	1880	799	35,297
1848	100	6,696	1881	824	35,630
1849	110	6,763	1882	826	35,639
1850	119	7,093	1883	855	37,546
1851	138	8,011	1884	893	38,618
1852	175	9,081	1885	930	39,828
1853	186	9,447	1886	972	39,779
1854	207	9,717	1887	994	41,199
1855	217	10,588	1888	1,119	46,521
1856	238	11,441	1889	1,187	48,850
1857	245	11,269	1890	1,244	50,899
1858	256	11,587	1891	1,301	52,543
1859	267	11,750	1892	1,382	54,406
1860	284	13,186	1893	1,464	57,048
1861	295	13,424			

TABLE ACCOMPANYING THE SUPERINTENDENT'S REPORT.

TABLE D.

SCHOOLS.	NUMBER OF PUPILS BETWEEN THE AGES OF																Totals
	5–6	6–7	7–8	8–9	9–10	10–11	11–12	12–13	13–14	14–15	15–16	16–17	17–18	18–19	19–20	20–21	
Baltimore City College									4	84	159	139	98	40	14	1	539
Eastern Fem. High School									7	50	87	117	100	58	23	4	446
Western Fem. High School									7	44	136	169	109	49	14	2	530
Totals									18	178	382	425	307	147	51	7	1,515
Balto. Polytechnic Institute							6	28	79	143	118	70	23	14	2	3	486
Col'd Man'l Training School									3	9	20	25	10	7	7	6	87
Totals							6	28	82	152	138	95	33	21	9	9	573
Male Grammar No. 1				1	12	31	63	68	59	54	24	4	1				317
" " " 2					13	50	94	112	86	48	12	4	1				420
" " " 3					3	15	24	40	17	9	3	2	1				114
" " " 4					11	30	40	55	54	28	19	4					241
" " " 5				1	8	28	36	57	45	42	6	3					226
" " " 6				4	16	53	76	89	89	63	33	12	2				437
" " " 7					12	33	62	80	60	45	14	9					315
" " " 8				1	15	46	74	94	82	43	18	1	1				375
" G. & P. " 9	1	5	12	10	23	16	19	11	14	12	8	1		1			133
" " " 10					9	55	55	84	83	33	26	8	1				354
" " " 11				1	18	29	53	66	44	20	11	3					245
" " " 12					19	52	75	66	60	37	16	2					327
" " " 13					8	23	31	28	22	23	10	6	1				152
" " " 15				2	15	51	79	95	98	62	33	1					436
" " " 16	10	45	37	53	42	54	32	41	21	19	4						358
" " " 17				3	9	34	46	55	51	33	14	1	1				247
" " " 18					10	27	30	51	40	31	16	4					209
" " " 19				1	18	44	74	94	91	44	37	9					412
" " " 20				1	26	47	67	102	103	46	35	6					433
" " " 21				1	9	35	72	78	85	50	35	8	1				374
" " " 22				1	6	37	30	47	49	36	24						230
Totals	11	50	49	80	302	790	1,132	1,413	1,253	778	398	88	10	1			6,355

Schools.	NUMBER OF PUPILS BETWEEN THE AGES OF															Totals
	5-6	6 7	7-8	8-9	9-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	
Female Grammar No. 1	.....	.....	... .	.....	16	33	50	67	81	64	34	12	3	.....	.....	.....	360
" " " 2	.....	.....	....	1	19	57	96	140	73	35	12	2	.....	.....	.....	.....	435
" " " 3	.....	.....	.....	.....	8	18	33	37	30	12	2	.... .	.....	.....	.....	.....	140
" " " 4	.....	.....	.....	.....	8	38	46	50	46	20	21	2	2	.....	.....	.....	233
" " " 5	.....	....	.....	1	15	36	48	64	51	40	17	1	1	1	.....	.. ...	275
" " " 6	.....	.....	.....	.....	18	47	88	96	105	84	46	20	2	.....	.....	.....	506
" " " 7	.....	.....	.....	1	23	66	63	64	50	39	8	4	.....	.....	.....	.....	318
" " " 8	.....	.....	....	.....	2	28	73	87	97	77	47	14	8	2	.....	... ..	435
" G. & P. " 9	13	15	17	15	16	16	15	12	9	3	2	.....	.....	.....	.....	.....	133
" Grammar " 10	.....	.....	.....	.....	23	49	73	87	80	41	22	12	.....	.....	.....	.....	387
" " " 11	.....	.....	.....	3	15	57	76	88	82	36	17	5	.....	.....	.....	.....	379
" " " 12	.....	.....	.....	1	10	35	72	61	72	20	7	.....	.....	.....	.....	.....	278
" " " 13	.....	.....	.....	.....	20	34	48	45	48	34	19	4	.....	.....	.....	.....	252
" " " 15	.....	.....	.....	2	22	65	99	90	100	88	46	18	3	.....	.....	.....	533
" " " 16	16	46	57	56	55	48	41	32	13	7	2	.....	.....	.....	.....	.....	373
" " " 17	.....	.....	.....	.....	20	39	55	56	49	21	17	5	.....	.....	.....	.....	262
" " " 18	.....	.....	.....	.....	9	33	38	61	76	33	42	18	2	.....	.....	.....	312
" " " 19	.....	.....	.....	.....	14	50	85	79	93	90	31	10	4	.....	.....	.....	456
" " " 20	.....	.....	.....	1	24	66	93	107	122	82	42	11	1	2	.....	.....	551
" " " 21	.....	.....	....	1	9	43	90	78	97	76	37	31	2	2	.....	.....	466
Totals	29	61	74	82	346	858	1282	1401	1374	902	471	169	28	7	.....	.....	7084
English-German No. 1	1	39	74	52	63	57	65	59	53	27	10	1	.....	.....	.....	.....	501
" " 2	8	102	125	164	163	146	147	96	64	11	6	.....	.....	.....	.....	.....	1032
" " 3	34	144	204	196	212	224	184	160	124	59	20	1	.....	.....	.....	.....	1562
" " 4	8	150	181	173	210	195	180	152	85	28	8	2	.....	.....	.....	.....	1372
" " 5	12	110	138	155	125	136	112	102	76	34	13	3	.....	.....	.....	.....	1026
Totals	63	545	722	740	783	758	688	569	402	159	57	7	.....	.....	.....	... ...	5493

TABLES ACCOMPANYING THE SUPERINTENDENT'S REPORT—TABLE D—Continued.

SCHOOLS.	NUMBER OF PUPILS BETWEEN THE AGES OF															Totals
	5–6	6–7	7–8	8–9	9–10	10–11	11–12	12–13	13–14	14–15	15–16	16–17	17–18	18–19	19–20	20–21	
Male Primary No. 1	4	33	72	64	55	42	25	18	6	2							321
" " 2	1	25	30	31	38	45	25	8	2	1	1	1					208
" " 3	5	33	57	58	70	49	42	28	12	3							357
" " 4	9	43	46	52	49	51	10	4	1								265
" " 5	10	59	71	86	95	73	33	33	5	3							468
" " 6	27	44	76	102	67	50	15	15	9								405
" " 7	16	39	33	49	32	34	17	4	1							1	226
" " 8	13	23	30	25	29	34	28	11	5	3	1						202
" " 10	4	40	30	59	30	28	12	14	5	1							223
" " 11	10	90	100	117	98	66	44	28	13	4							570
" " 12	4	57	89	94	60	50	21	12	4	2							393
" " 13	3	32	29	30	22	27	11	13	7	2							176
" " 14	10	39	62	69	65	40	18	10	3	3	1						320
" " 15	6	40	67	77	71	52	24	20	8	3							368
" " 16	5	34	47	52	43	42	13	10	1	2							249
" " 17	4	35	53	51	51	51	17	22	5		2						291
" " 18	9	22	38	48	39	28	12	5	3								204
" " 19	3	20	26	29	27	22	16	10	2								155
" " 20	39	94	128	112	155	79	75	25	12	2	2						723
" " 21	10	46	48	48	69	55	34	23	10	4							347
" " 22	6	68	69	74	62	60	43	27	8	1							418
" " 23	4	52	87	72	76	38	21	10	9	3							372
" " 24	10	98	95	113	64	77	53	17	4	1							532
" " 25	6	33	59	52	48	33	16	17	10	1	1						276
" " 26	10	46	44	35	34	24	14	14		2		1					224
" " 27	7	62	70	93	63	42	27	6	4								374
" " 28	4	62	51	43	43	47	20	19	12	5							306
" " 29	12	39	43	27	27	18	12	12	3								193
" " 30	10	55	103	124	108	89	55	40	15	4	3						606
" " 31		30	38	32	41	25	20	8	2								196
" " 32	9	42	65	65	51	30	15	4	5								286
" " 33	23	63	75	80	74	42	39	26	5	6							433
" " 36	13	33	41	32	24	24	13	9	3	3							195
" " 37	18	24	30	18	30	10	12	4	2								148
Totals	324	1555	2002	2113	1910	1477	852	526	196	61	11	2				1	11,030

SCHOOLS.	NUMBER OF PUPILS BETWEEN THE AGES OF															Totals
	5–6	6–7	7–8	8–9	9–10	10–11	11–12	12–13	13–14	14–15	15–16	16–17	17–18	18–19	19–20	20–21	
Female Primary No. 1.....	1	34	67	62	70	45	24	13	6	1	1	.....	.....	.....	.....	.....	324
" " 2.....	8	53	44	40	45	31	24	13	.....	1	.....	.....	.....	.....	.....	.....	259
" " 3.....	23	83	48	54	62	45	15	10	5	2	.....	.....	.....	.....	.....	.....	347
" " 4.....	14	25	55	33	56	18	15	6	1	.....	.....	.....	.....	.....	.....	.....	223
" " 5.....	23	64	84	87	85	50	32	14	7	.....	.....	.....	.....	.....	.....	.....	446
" " 6.....	7	68	87	81	73	66	15	4	4	.....	.....	.....	.....	.....	.....	.....	405
" " 7.....	20	40	42	53	39	23	14	2	2	1	.....	.....	.....	.....	.....	.....	236
" " 8.....	2	43	39	35	45	25	11	2	7	3	1	.....	.....	.....	.....	.....	213
" " 10.....	13	34	25	44	37	29	23	8	1	3	.....	.....	.....	.....	.....	.....	217
" " 11.....	7	130	129	104	84	30	13	6	.....	3	1	.....	.....	.....	.....	.....	507
" " 12.....	.....	65	97	83	78	56	24	18	2	1	.....	.....	.....	.....	.....	.....	424
" " 13.....	6	19	36	31	34	27	21	.....	.....	1	.....	.....	.....	.....	.....	.....	175
" " 14.....	4	32	58	78	63	41	19	12	3	.....	.....	.....	.....	.....	.....	.....	310
" " 15.....	8	50	66	75	85	43	26	12	6	1	1	1	.....	.....	.....	.....	374
" " 16.....	2	36	53	44	33	18	17	6	1	.....	.....	.....	.....	.....	.....	.....	210
" " 17.....	5	41	63	63	58	34	32	17	6	.....	.....	.....	.....	.....	.....	.....	319
" " 18.....	2	28	55	49	42	36	11	7	1	.....	1	.....	.....	.....	.....	.....	232
" " 19.....	.....	18	17	26	24	20	13	4	2	2	.....	.....	.....	.....	.....	.....	126
" " 20.....	13	90	140	117	111	65	40	14	10	2	.....	.....	.....	.....	.....	.....	602
" " 21.....	1	37	40	60	49	37	28	19	11	4	.....	.....	.....	.....	.....	.....	286
" " 22.....	4	38	70	94	85	47	38	21	4	2	.....	.....	.....	.....	.....	.....	403
" " 23.....	14	52	54	71	62	52	36	12	6	.....	.....	.....	.....	.....	.....	.....	359
" " 24.....	15	75	117	98	107	91	33	24	8	.....	.....	.....	.....	.....	.....	.....	568
" " 25.....	15	50	52	42	58	46	17	9	.....	.....	.....	.....	.....	.....	.....	.....	289
" " 26.....	11	30	40	48	49	21	13	10	2	.....	.....	.....	.....	.....	.....	.....	224
" " 27.....	10	37	95	82	72	44	22	13	7	.....	.....	.....	.....	.....	.....	.....	382
" " 28.....	3	54	64	44	57	50	30	12	2	.....	.....	.....	.....	.....	.....	.....	316
" " 29.....	5	38	37	23	22	22	8	4	3	.....	.....	.....	.....	.....	.....	.....	162
" " 30.....	11	67	101	117	88	53	41	17	10	4	.....	.....	.....	.....	.....	.....	509
" " 31.....	10	29	38	31	35	22	20	9	9	3	1	.....	.....	.....	.....	.....	207
" " 32.....	6	39	56	60	45	34	15	6	5	.....	.....	.....	.....	.....	.....	.....	266
" " 33.....	5	52	69	67	70	62	36	23	5	2	.....	.....	.....	.....	.....	.....	391
Totals	268	1551	2038	1996	1923	1,283	726	347	136	36	6	1	.....	.....	.....	.....	10,311

TABLE D—Continued.

Schools.	Numrer of pupils between the ages of															Totals
	5–6	6–7	7–8	8–9	9–10	10–11	11–12	12–13	13–14	14–15	15–16	16–17	17–18	18–19	19–20	20–21	
H. and G. Col'd No. 1	.....	.....	.....	.....	.....	12	30	62	105	103	107	71	41	26	16	6	579
Grammar " " 2	.....	.....	.....	....	1	2	13	37	41	53	27	17	.....	.....	.....	.....	191
" " " 3	.....	.....	.....	.....	.....	6	10	23	58	82	53	27	6	3	.....	.....	268
Male Colored " 1	1	10	21	16	29	36	28	39	24	13	10	3	.....	.....	.....	.....	230
" " 2	.....	14	41	45	48	35	36	30	24	11	5	.....	.....	.....	.....	.....	289
" " 3	6	38	45	56	64	58	48	39	19	25	2	1	.....	.....	.....	.....	401
" " 4	.....	25	54	63	90	64	47	45	38	19	5	.....	.....	.....	.....	.....	450
" " 5	....	11	11	9	17	18	21	16	14	9	.....	.....	.....	.....	.....	.....	126
" " 6	.....	21	39	36	34	45	25	21	27	13	8	2	.....	.....	.....	.....	271
" " 7	1	29	51	45	59	62	33	38	37	13	6	2	1	.....	.....	.....	377
" " 8	.....	21	41	34	31	45	47	24	26	10	5	1	.....	.....	.....	.....	285
" " 9	5	21	39	86	95	71	61	79	54	24	18	5	1	.....	.....	.....	559
Female Colored " 1	.....	14	20	39	57	59	54	61	37	48	9	4	.....	.....	.....	.....	402
" " 2	.....	22	45	41	46	35	37	24	15	2	3	.....	.....	.....	.....	.....	270
" " 3	1	51	42	48	65	58	73	54	23	12	.....	.....	.....	.....	.....	.....	427
" " 4	2	18	57	61	65	57	55	38	40	17	7	1	.....	.....	.....	.....	418
" " 5	4	25	21	21	40	16	23	12	14	8	2	.....	.....	.....	.....	.....	186
" " 6	1	28	30	39	34	47	25	28	30	11	3	2	.....	.....	.....	.....	278
" " 7	1	26	66	99	97	104	65	81	65	29	25	3	.....	.....	.....	.....	661
" " 8	3	32	40	42	49	46	42	21	30	11	5	.....	1	.....	.....	.....	322
" " 9	6	51	61	73	70	74	67	40	64	29	12	2	.....	.....	.....	.....	549
Totals.....	31	457	724	853	991	950	840	812	785	542	312	141	50	29	16	6	7,539

TABLE D—Continued.

SCHOOLS.	NUMBER OF PUPILS BETWEEN THE AGES OF															Totals
	5–6	6–7	7–8	8–9	9–10	10–11	11–12	12–13	13–14	14–15	15–16	16–17	17–18	18–19	19–20	20–21	
Annex No. 1	.....	43	34	37	41	35	33	34	11	4	.....	.....	.....	.....	.....	.....	272
" " 2	9	54	90	88	82	118	97	87	92	46	27	14	2	.....	.....	.....	806
" " 3, Male	.....	.....	.....	1	3	16	18	35	44	20	9	4	1	.....	1	.....	152
" " 3, Female	.....	.....	.....	.....	6	17	34	29	42	22	15	7	1	.....	.....	.....	173
" " 4	4	56	66	81	61	61	29	12	5	.....	.....	.....	.....	.....	.....	.....	375
" " 5	19	50	55	59	58	39	20	13	2	.....	.....	.....	.....	.....	.....	.....	315
" " 6	.....	.....	.....	8	23	50	64	50	45	30	17	3	.....	.....	.....	.....	290
" " 7	6	34	53	58	51	69	59	44	33	21	10	2	.....	.....	.....	.....	440
" " 8	1	49	80	87	75	77	73	50	58	28	21	4	2	.....	.....	.....	605
" " 9	3	18	32	34	40	32	35	29	26	15	8	2	.....	.....	.....	.....	274
" " 10	.....	.....	.....	1	1	13	27	31	15	16	11	2	.....	.....	.....	.....	117
" " 11	9	54	48	45	60	55	42	49	36	43	16	6	.....	.....	.....	.....	463
" " 12	13	124	101	126	87	86	95	78	32	13	5	1	.....	.....	.....	.....	761
" " 13	20	91	118	126	109	84	84	74	53	18	7	1	.....	.....	.....	.....	785
" " 14	.....	5	7	7	5	10	6	5	5	1	5	1	.....	.....	.....	.....	57
" " 15	1	9	13	10	14	10	11	11	5	8	7	.....	.....	.....	.....	.....	99
" " 34, Male	.....	49	62	54	34	22	22	17	5	2	.....	.....	.....	.....	.....	.....	267
" " 34, Female	3	32	39	66	47	47	24	7	6	1	.....	.....	.....	.....	.....	.....	272
" " 35	19	20	30	34	28	21	13	6	3	.....	.....	.....	.....	.....	.....	.....	174
" " 1, Colored	12	13	9	14	13	14	11	8	7	4	.....	1	.....	.....	.....	.....	106
" " 3, "	....	10	13	16	16	20	15	11	9	11	4	1	.....	.....	.....	.....	126
" " 10, "	9	24	31	31	21	25	17	20	17	14	5	4	1	.....	.....	.....	219
Totals	128	735	881	983	875	921	829	700	551	317	167	53	7	.....	1	.....	7,148

TABLES ACCOMPANYING THE SUPERINTENDENT'S REPORT.

TABLE D—Concluded.

RECAPITULATION.

SCHOOLS.	NUMBER OF PUPILS BETWEEN THE AGES OF																Totals
	5–6	6–7	7–8	8–9	9–10	10–11	11–12	12–13	13–14	14–15	15–16	16–17	17–18	18–19	19–20	20–21	
College and High									18	178	382	425	307	147	51	7	1,515
Polytechnic and Colored Manual Training							6	28	82	152	138	95	33	21	9	9	573
Male Grammar	11	50	49	80	302	790	1132	1413	1253	778	398	88	10	1			6,355
Female Grammar	29	61	74	82	346	858	1282	1401	1374	902	471	169	28	7			7,084
English-German	63	545	722	740	783	758	688	569	402	159	57	7					5,493
Male Primary	324	1555	2002	2113	1910	1477	852	526	196	61	11	2				1	11,030
Female Primary	268	1551	2038	1996	1923	1283	726	347	136	36	6	1					10,311
Colored	31	457	724	853	991	950	840	812	785	542	312	141	50	29	16	6	7,539
Annex	128	735	881	983	875	921	829	700	551	317	167	53	7		1		7,148
Totals	854	4954	6490	6847	7130	7037	6355	5796	4797	3125	1942	981	435	205	77	23	57,048

TABLE E.

Statement Showing the Number of Pupils in each Grade.

SCHOOLS. COLLEGE, HIGH AND POLYTECHNIC.	Fifth year.	Fourth year.		Third year.		Second year.		First year.		Preparatory.	Totals.	
	Males.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Males.	Females.
Baltimore City College	18	40		78		153		250			539	
Eastern Female High			74		86		136		150			446
Western Female High			59		82		121		268			530
Polytechnic				19		40		97		330	486	
Manual Training Colored										87	87	
*High and Grammar Colored No. 1		3	8	2	16	9	20	13	33		27	77
Totals	18	43	141	99	184	202	277	360	451	417	1139	1053

*See also "Mixed Schools."

TABLES ACCOMPANYING THE SUPERINTENDENT'S REPORT.

TABLE E—Continued.

GRAMMAR SCHOOLS.	Eighth Grade.	Seventh Grade.	Sixth Grade.	Fifth Grade.	Fourth Grade.	Totals.
Male No. 1	33	32	77	72	103	317
" 2	21	46	88	129	136	420
" 3	.....	6	21	32	55	114
" 4	22	29	53	74	63	241
" 5	18	32	40	46	90	226
" 6	47	70	69	105	146	437
" 7	9	21	49	103	133	315
" 8	16	44	70	110	135	375
" 10	20	47	54	100	133	354
" 11	12	24	41	66	102	245
" 12	17	22	48	93	147	327
" 13	8	18	40	36	50	152
" 15	30	65	80	109	152	436
" 17	15	27	46	73	86	247
" 18	14	16	48	55	76	209
" 19	47	51	92	112	110	412
" 20	34	59	86	120	134	433
" 21	24	54	79	87	130	374
Totals	387	663	1081	1522	1981	5634
Female No. 1	36	54	72	87	111	360
" 2	24	58	67	126	160	435
" 3	.....	19	21	37	63	140
" 4	21	27	36	57	92	233
" 5	30	40	49	73	83	275
" 6	50	96	103	112	145	506
" 7	15	27	67	90	119	318
" 8	36	55	81	108	155	435
" 10	28	39	69	111	140	387
" 11	23	30	84	96	146	379
" 12	15	24	41	68	130	278
" 13	27	31	53	65	76	252
" 15	50	80	120	144	139	533
" 17	19	19	46	66	112	262
" 18	27	57	51	98	79	312
" 19	36	104	82	111	123	456
" 20	55	77	108	148	163	551
" 21	62	78	88	109	129	466
Totals	554	915	1238	1706	2165	6578

TABLES ACCOMPANYING THE SUPERINTENDENT'S REPORT.

TABLE E—Continued.

PRIMARY SCHOOLS.	Third Grade.	Second Grade.	First Grade.	Totals.	PRIMARY SCHOOLS.	Third Grade.	Second Grade.	First Grade.	Totals.
Male No. 1.....	81	99	141	321	Female No. 1...	76	126	122	324
" 2.....	30	43	135	208	" 2...	31	33	195	259
" 3.....	61	90	206	357	" 3...	59	85	203	347
" 4.....	49	88	128	265	" 4...	40	70	113	223
" 5.....	84	142	242	468	" 5...	98	124	224	446
" 6.....	78	153	174	405	" 6...	78	104	223	405
" 7.....	32	66	128	226	" 7...	33	59	144	236
" 8.....	55	43	104	202	" 8...	35	77	101	213
" 10.....	54	68	101	223	" 10...	55	56	106	217
" 11.....	135	182	253	570	" 11...	114	163	230	507
" 12.....	78	96	219	393	" 12...	96	138	190	424
" 13.....	30	32	114	176	" 13...	30	50	95	175
" 14.....	111	101	108	320	" 14...	94	93	123	310
" 15.....	105	111	152	368	" 15...	117	99	158	374
" 16.....	47	77	125	249	" 16...	35	62	113	210
" 17.....	60	81	150	291	" 17...	71	78	170	319
" 18.....	60	57	87	204	" 18...	59	61	112	232
" 19.....	40	44	71	155	" 19...	36	36	54	126
" 20.....	154	175	394	723	" 20...	174	159	269	602
" 21.....	83	118	146	347	" 21...	60	75	151	286
" 22.....	94	128	196	418	" 22...	82	93	228	403
" 23.....	78	123	171	372	" 23...	82	99	178	359
" 24.....	74	115	343	532	" 24...	120	151	297	568
" 25.....	55	41	183	276	" 25...	43	97	149	289
" 26.....	49	71	104	224	" 26...	55	63	106	224
" 27.....	81	95	193	374	" 27...	86	104	192	382
" 28.....	63	77	166	306	" 28...	54	84	178	316
" 29.....	33	40	120	193	" 29...	34	37	91	162
" 30.....	165	201	240	606	" 30...	120	163	226	509
" 31.....	61	52	83	196	" 31...	48	59	100	207
" 32.....	70	101	115	286	" 32...	71	103	92	266
" 33.....	89	145	199	433	" 33...	66	109	216	391
Totals.....	2341	3055	5291	10687	Totals.....	2252	2910	5149	10311

MIXED SCHOOLS.	8th grade		7th grade		6th grade		5th grade		4th grade		3d grade		2d grade		1st grade		Totals.	
	Males	Fem.	Males	Fem.	Males	Fem.	Males	Fem.	Males	Fem.	Males	Fem.	Males	Fem.	Males	Fem.	Males.	Fem.
Male Gram. and Prim. No. 9	3		9		8		14		18		28		31		22		133	
Fem. Gram. and Prim. " 9		7		8		14		13		16		20		18		37		133
Male Grammar No. 16			8		9		25		36		46		86		148		358	
Female " " 16		2		1		9		11		26		48		104		172		373
Grammar " 22	2	3	20	18	19	24	23	28	54	39							118	112
English-German " 1	4	5	11	20	17	13	26	24	41	34	50	49	57	44	55	51	261	240
" " 2	6	4	9	8	18	15	51	27	53	63	84	92	109	100	226	167	556	476
" " 3	8	14	22	15	34	41	96	87	106	88	177	79	149	165	266	215	858	704
" " 4	8	7	18	15	36	32	65	54	102	99	130	109	173	142	220	162	752	620
" " 5	12	10	17	25	31	33	61	56	70	73	74	72	88	93	172	139	525	501
Primary No. 36											15	12	32	27	44	65	91	104
" " 37											6	10	21	14	50	47	77	71
*High and Gram. Colored No. 1	7	30	21	30	37	103	114	133									179	296
Grammar Colored No. 2	6	9	10	22	11	36	43	54									70	121
" " 3	4	13	5	34	15	57	57	83									81	187
Male Colored No. 1									31		53		53		93		230	
" " 2									38		48		93		110		289	
" " 3									44		74		99		184		401	
" " 4									77		91		112		170		450	
" " 5									14		22		26		64		126	
" " 6									30		53		79		109		271	
" " 7									28		42		88		219		377	
" " 8									27		59		72		127		285	
" " 9									44		76		130		309		559	
Fem. Col'd " 1										67		86		78		171		402
" " 2										32		23		76		139		270
" " 3										26		69		85		247		427
" " 4										43		69		103		203		418
" " 5										20		20		47		99		186
" " 6										35		36		54		153		278
" " 7										49		110		179		323		661
" " 8										45		57		73		147		322
" " 9										51		58		153		287		549
Totals, Males	60		150		235		845		813		1128		1498		2318		7047	
" Females		104		196		377		570		806		1019		1555		2824		7451

*See also first page of this table.

ANNEX SCHOOLS.	8th grade		7th grade		6th grade		5th grade		4th grade		3d grade		2d grade		1st grade		Totals.	
	Males	Fem.	Males	Fem.	Males	Fem.	Males	Fem.	Males	Fem.	Males	Fem.	Males	Fem.	Males	Fem.	Males	Fem.
Annex School No. 1	.....	.....	.....	.....	7	9	11	16	15	21	14	26	14	21	67	51	128	144
" " 2	14	21	14	33	20	34	43	43	55	59	66	54	72	82	102	94	386	420
" " 3 Male	13	.....	19	.....	26	.....	39	.....	55	.....	.....	.....	.....	.....	.....	.....	152	.....
" " 3 Fem.	.....	20	.....	23	.....	32	.....	44	.....	54	.....	.....	.....	.....	.....	.....	.....	173
" " 4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	44	49	52	66	92	72	188	187
" " 5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	31	40	33	49	94	68	158	157
" " 6	1	9	12	13	19	22	36	41	60	77	.....	.....	.....	.....	.....	.....	128	162
" " 7	2	8	4	10	13	13	29	20	21	37	27	28	51	45	70	62	217	223
" " 8	7	6	10	13	12	28	23	33	36	30	54	49	66	63	88	87	296	309
" " 9	1	.....	6	6	8	9	10	19	29	20	25	17	27	23	37	37	143	131
" " 10	4	1	7	7	11	11	22	13	19	22	.....	.....	.....	.....	.....	.....	63	54
" " 11	7	12	10	12	16	19	14	24	41	29	37	39	38	24	72	69	235	228
" " 12	2	1	6	2	16	17	25	20	34	37	54	69	84	61	190	143	411	350
" " 13	.....	.....	5	5	17	18	21	35	36	33	77	51	79	93	178	137	413	372
" " 14	.....	.....	1	3	3	.....	3	6	4	2	4	3	3	6	8	11	26	31
" " 15	3	.....	6	1	1	5	11	8	1	6	4	8	5	6	18	16	49	50
" " 34 Male	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	36	.....	83	.....	148	.....	267	.....
" " 34 Fem.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	87	.....	62	.....	123	.....	272
" " 35	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	26	18	14	16	52	48	92	82
" " 1 Col'd	.....	.....	.....	.....	.....	4	.....	2	6	5	4	4	14	7	32	28	56	50
" " 3 "	.....	.....	.....	.....	.....	1	.....	1	3	3	15	4	11	10	46	32	75	51
" " 10 "	.....	.....	.....	.....	1	2	.....	.....	5	10	6	9	12	7	85	82	109	110
Totals, Males	54	.....	100	.....	170	.....	287	.....	420	.....	524	.....	658	.....	1379	.....	3592	.....
" Females	.....	78	.....	128	.....	224	.....	325	.....	445	.....	555	.....	641	.....	1160	.....	3556
In M. G. Schools	387	.....	663	.....	1081	.....	1522	.....	1981	.....	.....	.....	.....	.....	.....	.....	5634	.....
" F. G. "	.....	554	.....	915	.....	1238	.....	1706	.....	2165	.....	.....	.....	.....	.....	.....	.....	6578
" M. P. "	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2341	.....	3055	.....	5291	.....	10687	.....
" F. P. "	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2252	.....	2910	.....	5149	.....	10311
" Mixed "	60	104	150	196	235	377	845	570	813	806	1128	1019	1498	1555	2378	2824	7047	7451
Totals, Males	501	.....	913	.....	1486	.....	2654	.....	3214	.....	3993	.....	5211	.....	8988	.....	26960	.....
" Females	.....	736	.....	1239	.....	1839	.....	2601	.....	3416	.....	3826	.....	5106	.....	9133	.....	27896

TABLES ACCOMPANYING THE SUPERINTENDENT'S REPORT.

TABLE E—Concluded.

RECAPITULATION.

	Male.	Fem.	Totals
Number in Fifth year, High	18		18
" " Fourth year, High	43	141	184
" " Third year, High and Polytechnic	99	184	283
" " Second year, High and Polytechnic	202	277	479
" " First year, High and Polytechnic	360	451	811
" " Preparatory department, Polish	417		417
Totals	1,139	1,053	2,192
Number in Grammar, Eighth Grade	501	736	1,237
" " " Seventh Grade	913	1,239	2,152
" " " Sixth Grade	1,486	1,839	3,325
" " " Fifth Grade	2,654	2,601	5,255
" " " Fourth Grade	3,214	3,416	6,630
Totals	8,768	9,831	18,599
Number in Primary, Third Grade	3,993	3,826	7,819
" " " Second Grade	5,211	5,106	10,317
" " " First Grade	8,988	9,133	18,121
Totals	18,192	18,065	36,257
Number in High and Polytechnic Courses	1,139	1,053	2,192
" " Grammar School Courses	8,768	9,831	18,599
" " Primary Courses	18,192	18,065	36,257
Aggregate	28,099	28,949	57,048
Number in Night Schools			1,202
			58,250

TABLES ACCOMPANYING THE SUPERINTENDENT'S REPORT.

TABLE F.

PROMOTIONS TO FOURTH GRADE.

SCHOOLS.	Number on roll June 1, 1893.	Number recommended, June, 1893.	Number not recommended, but examined.	Number passed.	Number promoted.
Male Primary No. 1	94	82	.....	.....	82
" " 2	20	20	.....	.....	20
" " 3	43	38	2	.....	38
" " 4	36	32	2	2	34
" " 5	76	66	5	.....	66
" " 6	74	70	.....	.....	70
" " 7	26	26	.....	.....	26
" " 8	36	32	1	.....	32
" " 10	47	44	.....	.....	44
" " 11	151	110	9	.....	110
" " 12	68	59	.....	.....	59
" " 13	16	9	.....	.....	9
" " 14	113	100	1	.....	100
" " 15	105	74	1	1	75
" " 16	48	46	.....	.....	46
" " 17	55	48	.....	.....	48
" " 18	62	53	5	.....	53
" " 19	24	18	2	1	19
" " 20	121	111	3	.....	111
" " 21	55	48	.....	.....	48
" " 22	72	64	.....	.....	64
" " 23	79	65	14	.....	65
" " 24	65	60	1	.....	60
" " 25	36	32	.....	.....	32
" " 26	57	50	3	.....	50
" " 27	76	57	9	1	58
" " 28	48	39	.....	.....	39
" " 29	22	14	2	.....	14
" " 30	118	101	11	.....	101
" " 31	70	60	2	.....	60
" " 32	61	56	4	1	57
" " 33	50	40	.....	.....	40
" " 36	10	4	4	1	5
" Gram. " 9	28	19	3	.....	19
" " " 16	41	28	4	.....	28
Totals	2,113	1,775	88	7	1,782

TABLES ACCOMPANYING THE SUPERINTENDENT'S REPORT.

TABLE F—Continued.

PROMOTIONS TO FOURTH GRADE.

SCHOOLS.	Number on roll June 1, 1893.	Number recommended, June 1893.	Number not recommended, but examined.	Number passed.	Number promoted.
Female Primary No. 1	92	79	2		79
" " 2	27	26	1		26
" " 3	55	52			52
" " 4	49	44			44
" " 5	83	64	5		64
" " 6	80	78			78
" " 7	32	28	4		28
" " 8	49	37	2		37
" " 10	51	39	1		39
" " 11	107	101			101
" " 12	67	65			65
" " 13	19	18			18
" " 14	98	84	4	3	87
" " 15	91	79	9		79
" " 16	60	53	2		53
" " 17	48	34	9	2	36
" " 18	69	60	6		60
" " 19	29	29			29
" " 20	153	106	31		106
" " 21	59	46			46
" " 22	56	44			44
" " 23	62	54	4		54
" " 24	50	44	1		44
" " 25	39	33			33
" " 26	59	49	2		49
" " 27	70	54	16	3	57
" " 28	46	32	6		32
" " 29	29	26			26
" " 30	141	117	9	1	118
" " 31	43	34	2		34
" " 32	68	53	12	4	57
" " 33	53	40	13	2	42
Female Grammar " 9	15	15			15
" " 16	37	23	4	1	24
Totals	2,076	1,730	145	16	1,746

TABLES ACCOMPANYING THE SUPERINTENDENT'S REPORT.

TABLE F—Continued.

PROMOTIONS TO FOURTH GRADE.

SCHOOLS.	Number on roll June 1, 1893.	Number recommended, June 1893.	Number not recommended, but examined.	Number passed.	Number promoted.
English-German No. 1	83	49	27	.....	49
" " " 2	138	104	1	.....	104
" " " 3	213	170	17	.....	170
" " " 4	228	179	20	.....	179
" " " 5	139	107	1	1	108
Totals	801	609	66	1	610
Male Colored No. 1	28	21	3	.....	21
" " " 2	22	21	.....	.....	21
" " " 3	55	33	.....	.....	33
" " " 4	94	70	.....	.....	70
" " " 5	20	14	2	.....	14
" " " 6	36	20	12	2	22
" " " 7	30	16	.....	.....	16
" " " 8	39	27	4	.....	27
" " " 9	55	38	13	.....	38
Female " " 1	64	50	9	2	52
" " " 2	22	20	.....	.....	20
" " " 3	29	23	1	.....	23
" " " 4	53	44	6	.....	44
" " " 5	20	17	3	.....	17
" " " 6	39	36	.....	.....	36
" " " 7	79	47	.....	.....	47
" " " 8	44	36	4	.....	36
" " " 9	52	37	7	.....	37
Totals	781	570	64	4	574

TABLES ACCOMPANYING THE SUPERINTENDENT'S REPORT.

TABLE F—Continued.

PROMOTIONS TO FOURTH GRADE.

SCHOOLS.	Number on roll June 1, 1893.	Number recommended, June 1893.	Number not recommended, but examined.	Number passed.	Number promoted.
Annex School No. 1	39	34	4		34
" " 2	119	94	10	2	96
" " 4	75	64			64
" " 5	63	63			63
" " 7	47	33	6		33
" " 8	65	46	4	1	47
" " 9	43	39	1		39
" " 11	74	56			56
" " 12	121	88	24	8	96
" " 13	125	47	31	3	50
" " 14	7	4			4
" " 34, Male	61	51			51
" " 34, Female	35	31			31
" " 35	38	28	2	2	30
" " 1, Colored	7	7			7
" " 3, "	5	3			3
" " 10, "	6	4			4
Totals	930	692	82	16	708

RECAPITULATION.

M. P. Schools and G. Nos. 9 and 16	2,113	1,775	88	7	1,782
F. P. Schools and G. Nos. 9 and 16	2,076	1,730	145	16	1,746
English-German Schools	801	609	66	1	610
Colored Schools	781	570	64	4	574
Annex Schools	930	692	82	16	708
Totals	6,701	5,376	445	44	5,420

REPORT

— OF THE —

Assistant Superintendent of Public Instruction.

BALTIMORE, January 1, 1894.

MR. HENRY A. WISE,

Superintendent of Public Schools:

SIR:

I desire, first, to call your attention to the tabular statement representing the promotion of pupils of the third to the fourth grade. In my last report I stated that mistakes of judgment had evidently been committed in making these promotions. The result this year shows clearly that more care and better thought have been exercised in the performance of this duty. While about the same percentage of the number on roll was recommended for promotion this year as last, only about one-half of the number unrecommended were examined, and out of this number only one-tenth passed. With the experience of the past two years, even better results should be obtained this year. But, to repeat what I have said in a previous report, this plan of promotion depends entirely upon the enriching of the teaching force in clear judgment and intelligence.

Every year, by reason of promotion, death, marriage or resignation, we lose about ten per cent. of the number of teachers engaged in primary school work, and everything depends upon the character of the material put in their places. Of necessity any inexperienced element must affect the teaching power, and if such weakening influence be not quickly eliminated by proper supervision and instruction, deterioration must take place. The strength of a school depends entirely upon possessing a well qualified corps of instructors who know *when* and *how* to do their work, and are also *willing* to do it in a proper and suitable manner. This condition is greatly interfered with by the necessity of employing every year so large a number of untried and inexperienced teachers. These need close and constant oversight in order to prevent the formation of bad methods of imparting instruction and to secure good habits of discipline. To this end the principal should have ample time at her command in order to acquaint herself with the condition of each class, not only with regard to its educational requirements, but with reference to the methods of instruction and the ability of the teacher in charge of each class. Our primary classes are so numerous that I can only have a general oversight, and know by general observation and consultation with the principal and teachers, the general condition of each class in our system. During the past year my visits were timed to meet especially this condition, but, notwithstanding every effort, I could only

partially meet with success, many teachers being left struggling without the needed assistance, except at irregular and disjointed intervals. The principal had not time, over and above her regular duties of teaching her own class and exercising a general supervision of the school, to assist the inexperienced teachers, consequently they were left comparatively alone to work out their own success with fear and trembling. Some action must soon be taken by the Board to remedy this evil. These teachers must be made qualified for their work before being appointed, or time must be given to the principal of the school to supervise their classes and instruct deficient teachers in their duty until they are qualified for the work of the class-room.

Notwithstanding this discouragement, there is a growing and marked improvement in the condition of the primary schools, both with regard to numbers and efficiency. The last year shows a greater increase than ever before in the history of the schools, and my inspection convinces me that, as a class, the teachers are becoming more proficient, and, consequently, the results more encouraging.

Education should not simply enable a child to learn and recite facts, but to see and utilize them. As one of the channels of information, sight produces in the mind subjects for thought. Trained sight sees things exactly, and the best possible means to do this work is the study of forms as developed by the art of drawing. Such

kinds of work as stick-laying, paper-folding, modeling of forms in clay to imitate the objects presented to a child and combining geometric forms in wood or in paper give to a child a trained power that he cannot obtain through books. By developing and training a child's perception, we enrich his mind with knowledge and furnish him with the means of acquiring information that will endure and be of lasting benefit to him. This reference to the subject is made to suggest an improvement in the course of study in the primary grades by the introduction of elementary industrial training. This objective work is now done by some of our best teachers, but its general introduction will be far-reaching in its educative results. It is the only branch which is specially intended to cultivate early the skill of the hand and the eye. This advantage cannot be overestimated. Such training, when the child is young and before the muscles are hardened, is sufficient to insure future development of skill without further special educative effort. The fact that this line of school work is duly appreciated by the schools of the country was clearly shown at the late Columbian Exposition at Chicago. Nearly every school system presented evidence of its great utility, and, while Baltimore city's exhibit, in reference to the general work of the school, was in harmony with those of the other cities of the Union, in this respect we were meagerly represented.

A very serious problem has been presented to us in the last few years by the great influx of Russian and Polish people into our community. Some schools in the central and eastern part of the city are composed almost entirely of this class of foreigners. The children enter our schools entirely unacquainted with a single word of the English language. With these conditions our teachers, equally ignorant of these foreign languages, are called upon to teach these foreign-born children. They have been able so far, by means of signs and object lessons, to do fairly good work, and the children have, under the circumstances, made remarkably good progress. They are quick and apt to learn, and their ardent desire to know how to communicate with their teachers and school-fellows in the English tongue, has prompted them to accept any ingenuity adopted by the teachers intended to accomplish this result. Something should be done to aid the teachers of these schools in accomplishing their allotted task.

The Mayor and City Council should provide more buildings for primary schools. The $6,000,000 loan awarded $400,000 for public school buildings, but as this will be used almost entirely for the Western Female High School and the Baltimore City College, other appropriations should be made for this purpose.

A primary school should be organized and a building erected in the neighborhood of South Carey street and

Washington road. This locality has, in the last few years, improved rapidly, and the children of this vicinity are now crowded in annexes provided for Nos. 12 and 22. New buildings should be provided for Primary Schools Nos. 36 and 37, now occupying private residences. A new primary school should be organized in the northwestern part of the city, to relieve the schools in that locality. The proposition made in the School Board by Mr. Murrill, to use for this purpose the building on the corner of Carrollton and Riggs avenues, now occupied by colored school No. 9, and to erect another building in a more suitable locality for the use of that school, is a step in the right direction. This building is sufficiently large for a white school and entirely too small for the school now occupying it. If this is not done, another building will have to be erected for the colored school, and one to supply the needs of the white children in the locality above mentioned. Some provision should be made to supply the educational needs of Canton. The two buildings now there are very much overcrowded, and there is no chance of providing additional accommodations. I would suggest the propriety of removing the old building on the corner of Chesapeake and Hudson streets, and the erection of a twelve-room building in its place. The lot is of sufficient size and is owned by the city. No. 33, in south Baltimore, having an existence of only three years, is very much over-crowded, there being now 950 pupils and twenty-one teachers in twelve

rooms. This seems to be an effort to do an impossible thing. Children cannot be educated surrounded by such conditions. Another school should be organized somewhat south of the railroad track in order to relieve this school of its present disadvantages. Nos. 6, 23 and 26 are unfortunately located, being surrounded by buildings, which prevent the entrance of light and air, so necessary to the comfort and progress of the pupils of the schools. In addition to this, the sanitary conditions are detrimental to the health and morals of the children. No. 22 is directly opposite Hayward and Bartlett's Foundry, on the corner of Scott and McHenry streets. During a greater part of the day the exercises of the school are practically suspended, owing to the noise made by the hammering of the employees in constructing boilers, etc. In addition, this building is imperfectly lighted and badly constructed. The site should be sold and a new building erected for the use of the school in a more favorable locality. No. 32 is now too small for the needs of the neighborhood. This can be remedied by an addition to the present building.

Death has removed from our service some of our most esteemed and useful teachers. "They rest from their labors and their works do follow them."

Owing to her long and eminently useful career, I desire to mention particularly Mrs. Matilda L. Hisky, late Principal of Male Primary No. 15. No special

eulogy is needed to embalm her memory in our hearts. The brightest niche in the Temple set apart for those whose ideal of life consists in an unswerving devotion to principle and duty must be awarded her. Her fidelity to every trust, from the highest to the lowest, was of the most conscientious character; and she has left in the hearts of her former friends and associates the highest appreciation of her good qualities and the tenderest recollections of her earthly virtues.

In concluding this report, I desire to express my belief that the Board can be truly congratulated upon the success of the schools during the past year, and also to express my thanks to the Board and its officers for the support and encouragement I have received in the discharge of my official duties. To the teachers I offer my congratulations for the success they have attained in the work of educating the children of this great city, and my thanks for their uniform kindness and courtesy extended to me on all occasions.

Respectfully submitted,

JOHN E. McCAHAN,

Assistant Superintendent.

REPORT

— OF THE —

Superintendent of Supplies

BALTIMORE, December 31, 1893.

To the Board of Commissioners
of Public Schools:

GENTLEMEN:

In accordance with custom and a reasonable expectation, the eighth annual report of this office is respectfully submitted.

The year which closes to-day will be memorable in school annals as the year which witnesses the largest increase in the roll and the attendance ever achieved in our public schools. As an officer of the Board, and a warm friend of popular education, this is very gratifying to me; and, although the statement of the fact itself rather belongs to the educational department than to the business, it is repeated here both as a matter of gratification and as explanatory of some of the work done in consequence of the increase.

During the year 1893 four new buildings were completed and occupied. Grammar School No. 18, Harlem avenue and Monroe street, was furnished with single desks throughout, and occupied at the September opening.

The building erected for the use of English-German School No. 1, on the corner of Pennsylvania avenue and Dolphin street, was provided with single desks, and ready for occupancy by said school in September; but as the Board decided that it would be wise to remove Baltimore City College to said building, the desks were removed and utilized in other schools as needed, particularly in Male Grammar School No. 1; and English-German No. 1 was credited with their cost.

Colored School No. 3, Hill street near Sharp, was completed after many vexatious delays, and having been furnished with double desks, was occupied by said school at the opening in September.

Annex School No. 8, Francis street, near Fulton, was furnished with single desks, and also occupied at the opening in September.

The erection of these buildings not only provided good, healthful facilities for acquiring an education by those immediately concerned, but they also made possible the relinquishment of some rented buildings, and to some extent relieved other schools and neighborhoods. While you are acquainted with the facts,

it seems wise that a brief statement of the circumstances should be made, both for record and as explanatory of the expense for furniture, etc.

The completion of Grammar School No. 18, and the consequent additional accommodation provided in the northwestern portion of the city, made it possible to relinquish the rented building used as a branch of Female Grammar School No. 21. It also prepared the way for the proper accommodation of the pupils in the branch of English-German School No. 5, who had been uncomfortably located in a rented building. Accordingly, that rented building was relinquished, and the scholars provided for in the building formerly occupied by Grammar School No. 18. Nor did the benefit stop there; for, in response to a request that provision be made for the accommodation of the remaining grammar school pupils in the vicinity of the old building, the Board organized a mixed school (No. 22) and provided for its opening in September.

The removal of Baltimore City College was a source of gratification to each department of Grammar and Primary No. 1, for both buildings were rehabilitated, and as some compensation for the privations undergone, some needed improvements in their furniture were made. At the opening in September the schools again resumed work in compact form.

The completion of Colored School No. 3's building

worked an unanticipated temporary benefit, in that its old house provided accommodations for Colored Grammar School No. 3, formerly occupying the building on Fremont street jointly with the Colored Manual Training School. When it was found that the latter required the whole building for shops, etc., and that the former could not do effective work because of the noise inseparable in manual training schools, some examination was made with a view to securing a suitable house, but without success. It was then happily determined to use the old building on Howard and Montgomery streets, (though very defective in character and situation), and on October 4th, the change was made.

The completion of Annex No. 8's building made it possible to relinquish the rented building on Druid Hill avenue. The building on Clifton street has not yet been sold, because the large increase in scholars seems to indicate that it will have to be used again, although it is so entirely unfit.

While regretting that English-German School No. 1 is forced to remain in its old uncomfortable building, and that Colored School No. 4 is required to await the time when it will have the benefit of the accommodation that the old English-German house will afford, it is a matter of congratulation that Baltimore City College is as comfortably housed as it is. It may be

said, with truth, that pupils and instructors have never worked in such bright, clean, well-heated and well-ventilated surroundings as they now have, although an assembly room and a suitable laboratory are still pressing necessities. As soon as you passed the necessary order a large force was put to work to make the required changes, and on September 11th, Baltimore City College occupied its new quarters. It is earnestly hoped that active steps will be taken to provide a permanent home for this institution.

While we have been gratified in being able to relinquish some rented buildings, circumstances have compelled us to take others.

The building on Collington avenue and Lombard street for Primary School No. 36, mentioned in the report for 1892, was fitted up and occupied on January 16th. The school has so increased that negotiations are now pending for an additional building.

Primary School No. 37 was established in a rented building, on the corner of Hoffman street and Collington avenue, and opened on October 9th.

The building on Courtland street, formerly occupied by Male Grammar and Primary School No. 9, was relinquished, and new quarters at No. 808 N. Calvert street rented and fitted up for occupation at the opening in September. This school is now nearer to its

patrons, while having more light and ventilation. It is hoped that permanent quarters will soon be provided for it, and the female department.

In the wisdom of the Board the female department of Annex School No. 3 was removed to a rented building on the corner of St. Paul street and Huntingdon avenue, and occupied at the opening in September.

Annex School No. 15 was organized in a rented building at the corner of North avenue and Twelfth street. This building (the best to be secured) was fitted up as well as possible, and made ready for the opening in September. It is earnestly hoped that the house now being constructed will be ready by the close of the present school year.

An additional house (No. 330 Twenty-second-and-a-half street) was secured in November, and fitted up for the accommodation of Annex Colored School No. 10.

The rented rooms used by Annex Colored School No. 1 were relinquished and new ones secured in the church on Merryman's lane, near the York road; the change taking place early in October.

As far as possible old furniture was used in the rented buildings, but in some cases it was necessary to purchase new.

Our new buildings are more comfortable, and have better facilities for storing books, supplies, etc., than was formerly the case.

Our thanks are due to the Inspector of Buildings for doing so much with the small appropriation at his command, both as to the new houses and the old ones. It should be a matter of congratulation to us that he has used the Smead system of heating and ventilating in three of the new buildings—we wish he had been able to use it in all—for by that system we have better heat, actual ventilation, purity of closets without any objectionable appearance, as well as unobstructed yard room; and all this without any perceptible increase in expense for fuel. I would be derelict in my duty if I did not repeat my earnest recommendation that this system be placed in some of our old houses—notably, Primary School No. 23.

At the risk of being considered officious, it seems necessary to repeat that no dwelling-house should be rented for school purposes until after every effort has failed to secure proper accommodations for the children. Indeed it is questionable whether it were not better for the health of the children that they be denied admission to the schools until sufficient accommodations be provided in large, well-ventilated rooms.

The usual white-washing (with some kalsomining) was done, repairs made, and fuel supplied during the

summer. As anticipated in the last report, much extra work was necessary upon the heating apparatus, several new stoves being needed and furnaces renewed. All that was necessary to be done was completed in time. In the interest of economy a few furnaces were patched up with a view to securing temporary service; they will need elaborate repairs this year.

The following is a statement of the furniture purchased during the year: 520 No. 1 desks, 760 No. 2 desks, 380 No. 3 desks, 126 No. 1 rear seats, 86 No. 2 rear seats, 41 No. 3 rear seats, 14 principals' desks, 42 assistants' desks, 385 chairs, 14 large book cases, 75 small book cases, 187 slate boards, 2,800 feet slates in walls, 12 wardrobes, 56 umbrella stands, 8 washstands, 6 tables, 8 principals' platforms, 55 assistants' platforms, 100 ash cans. The organs are purchased, under contract, direct by the Committee on Music. Besides these articles 1,640 old desks and 187 rear seats were renovated and repaired. Some gas pipes and fixtures were put in rooms assigned for use as Night Schools.

Accompanying this will be found an inventory of the furniture and heating apparatus now in the schools, with their value estimated upon two-thirds of cost.

During the past year many requests which were reasonable, and which under ordinary circumstances

would have been favorably reported and acted upon promptly, were delayed on account of the stringency in the currency situation, and the consequent prudence as exercised by all business people ; but it was a matter of great pleasure to me that the interested ones in nearly every case refrained from impatient criticism, and in some cases withdrew their applications for the time being.

In closing this report a pleasing performance is left me, namely, that of bearing grateful testimony to the uniform kindness of the members of the Board, the officers, the teachers, and the other employees of the Board which has been extended to me.

Very respectfully,

C. W. KEIDEL,
Superintendent of Supplies.

INVENTORY OF FURNITURE, HEATING APPARATUS, &c., IN THE SCHOOLS, DECEMBER 31, 1893.

SCHOOLS.	Pupils' desks.	Rear seats.	Settees.	Teachers' desks.	Chairs.	Book cases. Large	Book cases. Small	Black boards.	Clocks.	Organs.	Pianos.	Wardrobes	Umbrella stands.	Wash stands.	Tables.	Furnaces.	Stoves.	Screens.	Estimated valuation.
Baltimore City College	593	56	78	16	130	19	1	16	13	1	1	2			8	4			$6,850 00
East. Fem. High School	356	25	84	24	125	7		22	3		2				12	4	2	2	5,340 00
West. Fem. High School	418	32	159	15	115	14	7	32	2	1	1				9	5	1	1	4,715 00
Balto. Polytechnic Inst.	256	46		12	954	14		wall	13	1					16	2			5,356 00
Col'd Man'l Train'g Sch'l	109	12		11	67	8	6	25	1			1			1		15	22	900 00
Totals	1732	171	321	78	1391	62	14	95	32	3	4	3			46	15	18	25	$23,161 00
Male Grammar No. 1	459	64		10	36	2	6	24	2	1		1	1	1	1	6	1	2	$3,300 00
" " " 2	431	42		10	30	2	10	wall	2	1		1	1	1	1	$med	1	1	2,175 00
" " " 3	107	20	2	7	19	1	10	18	1	1		2			1	6	1	1	1,700 00
" " " 4	177	29	2	8	28	1	7	28	1	1		2	1	1	2		8	16	1,300 00
" " " 5	172	26		7	18	3	6	20	2	1				1	1		8	12	1,200 00
" " " 6	250	44		12	24	1	9	24	1	1			6	1		5	3	4	2,000 00
" " " 7	227	38		9	24	2	10	25	1	1		1	2	1	1	5	1	2	2,210 00
" " " 8	219	46	2	10	40	2	14	wall	2	1		2	3	3	1	$med	1		2,400 00
" G. & P. " 9	88	14	3	10	18	1	7	20	2	1							5	8	600 00
" Grammar " 10	191	28	1	8	26	3	12	36	2	1		1		1	1		8	16	1,400 00
" " " 11	191	32		8	24	2	7	15	1	1		1		1	1	6	1	2	1,830 00
" " " 12	226	31		9	14	1	6	17	1	1		2	1		1	5	3	6	1,900 00
" " " 13	125	29	10	8	22	3	4	20	1	1		1		1			7	12	1,120 00
" " " 15	327	63		16	36	12	1	48	2	2			2			5	1	2	2,840 00
" " " 16	191	32		8	30	2	7	24	1	1			2	4	1	6	1	2	2,700 00
" " " 17	206	30		10	32	2	7	23	1	1		1	4	1	1		10	20	1,300 00
" " " 18	406	35		17	20	2	6	wall	1	1		1	1	1	1	$med	1		2,550 00
" " " 19	376	32		8	38	2	8	wall	2	1		1	1			$med	1		2,460 00
" " " 20	293	32		11	38	2	10	wall	1	1		1	2	1	1	$med	1		2,850 00
" " " 21	251	40		10	36	2	8	26	2	1		2	2	1	1		13	24	1,640 00
M. & F. " " 22	179	28	3	8	19	2	4	23	1	1		1	1	1	1	4	2	3	1,700 00
Totals, Male Grammar	5092	735	23	204	572	50	159	391	30	22		21	30	21	17	48	78	133	$41,175 00

INVENTORY OF FURNITURE, HEATING APPARATUS, &c.—Continued.

SCHOOLS.	Pupils' desks.	Rear seats.	Settees.	Teachers' desks.	Chairs.	Book cases. Large	Book cases. Small	Black boards.	Clocks.	Organs.	Pianos.	Wardrobes	Umbrella stands.	Wash stands.	Tables.	Furnaces.	Stoves.	Screens.	Estimated valuation.
Female Grammar No. 1	248	40	38	10	26	3	5	36	1	....	1	1	2	1	1	6	1	2	$2,550 00
" " " 2	433	42	.....	10	30	3	10	wall	1	1	....	1	2	1	1	a	1	1	2,130 00
" " " 3	107	19	.....	6	17	2	7	20	1	1	....	1	1	1	1	a	1	1	800 00
" " " 4	166	26	15	7	24	2	8	26	1	1	1	1	2	1	2	.....	8	16	1,490 00
" " " 5	179	30	4	8	15	2	6	20	1	1	....	1	2	1	1	.....	7	16	1,250 00
" " " 6	274	34	12	9	45	2	6	28	1	....	1	1	4	.....	1	a	3	4	1,650 00
" " " 7	200	38	.....	9	24	2	10	25	1	1	....	1	2	1	1	a	1	2	2,200 00
" " " 8	248	46	8	10	40	2	14	wall	1	1	....	1	2	1	1	a	1	.....	2,400 00
" G. & P. " 9	87	10	.....	6	15	2	1	10	1	1	....	....	1	.....	.....	.....	7	12	560 00
" Grammar " 10	179	29	3	9	24	5	4	32	1	1	....	1	1	1	1	.....	8	16	1,500 00
" " " 11	215	28	.....	7	26	2	7	18	2	1	...	4	.....	1	1	a	1	1	1,250 00
" " " 12	177	28	5	9	36	1	6	24	1	1	....	1	2	.....	1	a	3	6	1,300 00
" " " 13	155	32	7	7	24	2	7	22	1	1	....	1	4	1	1	.....	7	12	1,200 00
" " " 15	355	45	.....	11	35	2	10	14	2	....	1	2	4	2	.....	4	2	2	2,675 00
" " " 16	191	32	.....	8	30	2	7	24	1	1	....	1	2	4	1	a	1	2	1,830 00
" " " 17	221	30	.....	10	32	2	7	23	1	1	....	1	4	1	....	.....	10	18	1,325 00
" " " 18	370	35	.....	7	20	2	6	wall	1	1	....	1	1	1	1	a	.....	.....	2,400 00
" " " 19	439	45	.....	9	38	2	8	wall	1	1	....	1	1	....	1	a	1	.....	2,560 00
" " " 20	299	48	.....	12	48	3	12	wall	1	1	....	1	1	1	1	a	1	.....	2,560 00
" " " 21	239	31	.....	10	24	1	10	32	2	1	....	1	1	1	1	.....	10	20	1,550 00
Totals, Fem. Gram.	4782	668	92	174	573	44	151	354	23	17	4	23	39	20	18	10	74	131	$35,180 00
English-German No. 1	331	42	2	13	25	7	1	28	....	....	.....	.....	.....	.....	.....	.....	13	15	$ 1,930 00
" " 2	537	72	.....	20	43	.....	16	44	2	2	....	4	4	2	4	6	2	2	3,610 00
" " 3	570	84	.....	26	48	2	19	49	2	2	....	2	.....	.....	2	2	10	14	3,875 00
" " 4	690	84	.....	24	50	.....	16	46	2	2	....	4	1	2	2	6	2	2	4,300 00
" " 5	596	88	.....	26	58	2	18	wall	2	1	....	2	4	2	2	Smead	3	5	4,500 00
Totals, Eng.-Ger.	2724	370	2	109	224	11	70	167	8	7	....	12	9	6	10	14	30	38	$18,215 00

INVENTORY OF FURNITURE, HEATING APPARATUS, &c.—Continued.

SCHOOLS.		Pupils' desks.	Rear seats.	Settees.	Teachrs' desks.	Chairs.	Book cases.		Black boards.	Clocks.	Organs.	Pianos.	Ward-robes.	Umbrel-la stands	Wash stands.	Tables.	Furn'ces	Stoves.	Screens.	Estima-ted valu-ation.
							Large.	Small.												
Male Primary	No. 1	272	60	2	12	40	1	9	28	1	1	....	1	3	1	1	a	1	1	$ 2,240 00
"	" 2	134	22	2	7	24	1	5	18	1	1	....	1	.....	.....	.....	.....	5	9	850 00
"	" 3	202	38	.....	6	20	1	7	24	1	1	....	2	2	1	1	a	1	1	900 00
"	" 4	151	24	5	6	18	3	5	22	1	1	....	1	.....	1	2	.....	6	12	1,075 00
"	" 5	269	40	3	8	30	2	7	28	1	1	....	1	1	.....	.....	6	1	1	2,220 00
"	" 6	215	36	.....	9	28	1	7	28	1	1	....	2	2	.....	1	.....	10	16	1,575 00
"	" 7	119	24	.....	6	24	1	5	14	1	1	....	1	1	.....	.....	2	3	6	1,050 00
"	" 8	202	38	.....	8	26	1	6	8	1	1	....	1	1	1	1	.....	9	17	1,250 00
"	" 10	117	21	2	7	18	2	3	22	1	1	....	1	.....	.....	.....	.....	6	9	940 00
"	" 11	292	38	.....	10	28	2	8	10	2	1	....	1	.....	.....	2	6	1	2	2,880 00
"	" 12	235	42	.....	9	28	3	8	28	1	1	....	1	1	1	2	.....	9	16	1,400 00
"	" 13	172	26	.....	6	30	1	5	wall	1	1	....	1	2	1	1	Smead	1	.....	1,640 00
"	" 14	179	27	.....	8	34	1	6	23	1	1	....	2	1	.....	1	5	1	.....	1,765 00
"	" 15	199	20	.....	9	24	1	6	18	1	1	1	.....	.....	1	.....	.....	9	12	1,350 00
"	" 16	179	27	5	6	20	1	4	22	1	1	....	1	.....	.....	1	5	.....	.....	1,875 00
"	" 17	166	33	.....	6	14	1	2	22	1	1	....	1	1	.....	1	.....	8	14	1,000 00
"	" 18	147	26	.....	6	26	1	3	18	1	1	....	1	1	.....	1	.....	7	14	960 00
"	" 19	192	43	.....	4	18	1	4	wall	1	.....	.....	1	2	1	1	Smead	.....	.....	1,250 00
"	" 20	373	61	.....	17	36	2	13	48	2	1	....	2	12	1	1	.....	16	34	2,350 00
"	" 21	177	31	.....	5	11	2	14	16	1	1	....	1	1	1	1	.....	7	10	1,100 00
"	" 22	230	38	11	10	24	1	8	24	1	1	....	.....	.....	.....	1	.....	9	14	1,200 00
"	" 23	205	26	.....	6	19	1	5	8	1	1	....	1	.....	.....	1	4	1	2	1,930 00
"	" 24	258	40	.....	9	36	2	8	wall	1	1	....	1	2	.....	1	Smead	4	6	2,200 00
"	" 25	226	34	.....	8	40	2	7	wall	1	1	....	2	.....	1	1	Smead	1	.....	2,020 00
"	" 26	119	20	4	7	18	1	4	20	1	1	....	1	4	1	1	.....	5	6	800 00
"	" 27	180	30	.....	7	18	1	6	26	1	1	....	1	3	1	1	.....	8	14	1,250 00
"	" 28	157	24	.....	6	18	1	6	26	1	1	....	1	1	1	1	.....	6	12	1,100 00
"	" 29	196	24	.....	6	18	1	6	10	1	1	....	1	1	1	1	5	1	1	2,140 00
"	" 30	314	46	.....	10	24	2	6	25	1	1	....	1	2	2	2	4	1	4	2,240 00
"	" 31	159	28	.....	6	29	1	5	wall	1	1	....	1	4	1	1	Smead	1	1	1,800 00
"	" 32	234	34	.....	8	30	1	5	wall	1	1	....	1	1	1	1	Smead	1	.....	1,925 00
"	" 33	204	28	.....	6	24	1	5	wall	1	1	....	1	1	1	1	Smead	1	.....	1,800 00
"	" 36	76	10	.....	3	10	1	3	6	1	.....	.....	1	1	1	.....	.....	3	4	480 00
M. & F. Prim.	" 37	67	8	.....	4	12	1	3	8	1	.....	.....	1	1	1	.....	.....	4	6	460 00
Totals, Male Primary....		6627	1067	34	251	817	46	204	550	36	31	1	37	52	23	30	37	147	244	$51,015 00

SCHOOLS.	Pupils' desks.	Rear seats.	Settees.	Teachers' desks.	Chairs.	Book cases. Large	Book cases. Small	Black boards.	Clocks.	Organs.	Pianos.	Wardrobes	Umbrella stands.	Wash stands.	Tables.	Furnaces.	Stoves.	Screens.	Estimated valuation.
Female Primary No. 1....	260	38	49	14	34	2	8	43	2	1	....	1	1	1	1	a	1	1	$1,540 00
" " 2....	137	18	.....	5	24	2	4	18	1	1	....	1	1	1	1	.....	5	10	800 00
" " 3....	180	24	2	6	24	2	8	18	1	1	....	1	1	1	1	a	1	1	920 00
" " 4....	128	22	6	6	18	1	4	16	1	1	....	1	.....	1	.....	.....	6	12	900 00
" " 5....	291	45	2	9	24	1	6	22	1	1	....	1	1	.....	.....	c	1	2	1,450 00
" " 6....	238	33	.....	7	20	1	10	20	1	1	....	1	1	....	1	.....	8	14	1,325 00
" " 7....	120	24	.....	5	13	1	5	12	1	1	....	2	1	.....	.....	c	2	4	650 00
" " 8....	182	35	.....	7	24	1	6	7	1	1	....	1	.....	1	1	.....	8	15	1,110 00
" " 10....	122	18	.....	7	18	2	4	20	2	1	....	1	3	1	1	.....	5	9	850 00
" " 11....	282	40	.....	10	30	2	9	16	2	1	....	1	6	.....	1	c	1	1	2,450 00
" " 12....	189	33	2	8	20	1	6	28	1	1	....	1	.....	.....	.....	.....	9	9	1,330 00
" " 13....	162	26	.....	6	30	1	5	wall	1	1	....	1	2	1	1	c	1	.....	1,635 00
" " 14....	199	28	.....	6	30	1	7	22	1	1	....	2	2	1	1	c	1	1	1,020 00
" " 15....	195	33	3	10	24	2	6	23	2	1	....	.....	.....	1	1	.....	9	14	1,325 00
" " 16....	159	27	.....	6	20	1	5	20	1	1	....	1	1	.....	1	c	.....	.....	920 00
" " 17....	188	28	.....	7	24	1	6	24	1	1	....	1	1	1	1	.....	7	14	1,150 00
" " 18....	146	22	.....	6	16	1	2	24	1	1	....	1	1	1	1	.....	6	12	850 00
" " 19....	150	20	.....	4	12	1	3	wall	1	1	....	1	2	1	1	c	.....	.....	950 00
" " 20....	387	52	.....	17	29	2	11	48	2	1	....	1	1	1	1	.....	16	34	2,200 00
" " 21....	173	31	.....	6	12	1	3	19	1	1	....	1	.....	.....	1	.....	7	14	2,000 00
" " 22....	188	30	11	6	12	1	6	19	1	1	....	1	2	1	1	.....	8	12	1,150 00
" " 23....	208	26	.....	6	24	1	5	10	1	1	....	1	.....	.....	1	c	1	1	1,285 00
" " 24....	262	42	.....	9	36	2	8	wall	1	1	....	1	2	1	1	c	4	4	2,100 00
" " 25....	226	34	.....	8	40	2	7	wall	1	1	....	1	2	1	1	c	1	.....	2,020 00
" " 26....	140	30	.....	5	12	1	3	18	2	1	....	.....	.....	1	.....	.....	5	16	880 00
" " 27....	241	42	.....	10	28	1	5	26	2	1	....	.....	1	.....	1	....	7	14	1,250 00
" " 28....	156	27	.....	7	17	2	7	23	1	1	....	1	1	1	1	.....	7	14	1,050 00
" " 29....	184	24	.....	6	20	1	6	6	1	1	....	1	.....	1	1	c	1	1	1,160 00
" " 30....	292	46	.....	10	17	1	6	30	2	1	....	.....	2	1	1	c	1	2	1,450 00
" " 31....	165	28	.....	6	29	1	5	wall	1	1	....	1	4	1	1	c	1	1	1,700 00
" " 32....	154	24	.....	6	24	1	5	wall	1	1	....	1	1	1	1	c	1	.....	1,600 00
" " 33....	180	24	.....	6	24	1	5	wall	1	1	....	1	1	1	1	c	1	.....	1,675 00
Totals, Female Primary.	6284	974	75	236	729	42	186	522	40	32	....	30	41	26	27	.....	132	232	$42,695 00

INVENTORY OF FURNITURE, HEATING APPARATUS, &c.—Continued.

SCHOOLS.	Pupils' desks.	Rear seats.	Settees.	Teachers' desks.	Chairs.	Book cases. Large	Book cases. Small	Black boards.	Clocks.	Organs.	Pianos.	Wardrobes	Umbrella stands.	Wash stands.	Tables.	Furnaces.	Stoves.	Screens.	Estimated valuation.
High & Gram. Col. No. 1.	308	64	.....	14	48	2	13	42	1	1	....	2	1	1	2	d	1	1	$2,800 00
Grammar Colored " 2.	184	36	.....	6	18	2	5	14	2	1	....	1	.....	.....	1	.....	10	18	1,250 00
" " " 3.	156	30	.....	11	30	6	8	26	2	1	.....	.....	.....	.....	1	.....	10	18	1,200 00
Male Colored No. 1.....	144	24	.....	4	16	1	4	12	1	1	....	1	1	1	1	6	1	1	1,850 00
" " " 2.....	161	30	.....	7	12	1	6	20	1	1	....	.....	.....	1	.....	.....	6	10	1,010 00
" " " 3.....	267	38	.....	7	30	1	7	wall	1	1	....	1	2	1	1	8	1	1	2,950 00
" " " 4.....	188	24	.....	6	18	2	6	18	2	1	....	1	1	1	1	.....	6	10	990 00
" " " 5.....	120	20	.....	5	18	1	4	15	1	1	....	1	1	1	1	.....	5	10	850 00
" " " 6.....	149	24	9	6	16	9	2	15	1	1	....	.....	.....	.....	.....	.....	6	9	975 00
" " " 7.....	254	39	.....	10	30	1	9	28	1	1	....	1	4	1	1	6	1	2	2,240 00
" " " 8.....	110	17	.....	6	15	2	3	14	1	1	....	1	1	.....	1	2	1	1	850 00
" " " 9.....	222	46	.....	10	30	2	10	wall	2	1	....	2	2	2	1	4	5	10	2,050 00
Female " " 1.....	235	24	.....	6	24	1	6	18	1	1	....	1	3	1	1	d	.....	.....	1,300 00
" " " 2.....	174	26	.....	7	19	2	6	16	1	1	....	1	.....	.....	.....	.....	6	14	1,100 00
" " " 3.....	273	38	.....	10	30	1	7	wall	1	1	....	1	3	1	1	d	1	1	2,300 00
" " " 4.....	185	26	4	8	10	1	4	20	1	1	....	1	3	1	1	.....	6	10	975 00
" " " 5.....	126	20	.....	5	18	1	4	15	1	1	....	1	1	1	1	.....	5	10	875 00
" " " 6.....	152	23	11	7	10	1	3	16	1	1	....	1	.....	1	1	.....	7	8	1,350 00
" " " 7.....	276	37	.....	12	28	1	11	31	1	1	....	2	1	1	2	d	2	4	1,450 00
" " " 8.....	161	25	.....	5	16	1	4	22	1	1	....	1	.....	.....	.....	d	3	6	800 00
" " " 9.....	211	35	.....	10	30	1	3	wall	2	1	....	1	2	1	1	d	4	6	1,475 00
Totals, Colored.....	3856	646	24	162	466	40	129	342	26	21	....	21	26	16	19	26	87	150	$35,640 00

INVENTORY OF FURNITURE, HEATING APPARATUS, &c.—Continued.

SCHOOLS.	Pupils' desks.	Rear seats.	Settees.	Teachers' desks.	Chairs.	Book Cases.		Black boards.	Clocks.	Organs.	Pianos.	Wardrobes	Umbrella stands.	Wash stands.	Tables.	Furnaces.	Stoves.	Screens.	Estimated Valuation.
						Large.	Small.												
Annex No. 1	153	28		6	14		4	wall	1	1		1	2		1		6	10	$ 650 00
" " 2	423	62		12	36		6	26	1					2			12	18	1,850 00
" " 3, Male	157	28		6	18		2	16	1		1		1		1		8	16	1,000 00
" " 3, Female	109	18		5	12		5	12	1			1	2	1	1		4	8	840 00
" " 4	166	28		6	24	1	5	wall	1	1		1	1	1	1	Smead	1		1,275 00
" " 5	180	30		6	18	2		10									6	12	850 00
" " 6	147	30		6	24	1	5	wall	1			1	1	1	1	Smead	1		1,275 00
" " 7	228	32		8	18	2	2	7	1			1	2		1		5	8	1,600 00
" " 8	371	48		14	36	2	12	wall	1	1		2	4	2	2	Smead	1		4,000 00
" " 9	186	26		6	18		2	10	1								6	14	750 00
" " 10	89	22		5	20	1		12	2								4	8	600 00
" " 11	302	48		12	40	2	10	wall	2	1		2	4	2	2	Smead	1		3,800 00
" " 12	462	46		12	26	1	6	28	1			1	4				14	25	1,875 00
" " 13	413	52		14	40	2	12	32	2	1		2	6	2	2	Smead	1		2,650 00
" " 14	44	7		2	6		2	4									2	4	300 00
" " 15	58	10		3	9	1	3	6	1								3	4	350 00
" " 34, Male	168	30		6	20	1	5	12	1	1		1	1	1	1	4			2,100 00
" " 34, Female	162	30		6	20	1	5	12	1	1		1	1	1	1	e			1,650 00
" " 35	165	24		6	20	1	5	15	1	1		1	2	1	1	Smead	1		1,500 00
" " 1, Colored	61	10		3	6		2	6	1								3	5	320 00
" " 3, "	68	14		4	8		3	7	1				1				3	5	350 00
" " 10, "	75	10		3	8		3	6	1				1				3	5	475 00
Totals, Annex	4187	633		151	441	18	99	221	23	8	1	15	33	14	14	5	85	142	$30,060 00

a. Included in Male Grammar Department.
b. " " Female " "
c. " " Male Primary "
d. " " Male Colored "
e. " " Male Annex "

INVENTORY OF FURNITURE, HEATING APPARATUS, &c.

RECAPITULATION.

SCHOOLS.	Pupils' desks.	Rear seats.	Settees.	Teachers' desks.	Chairs.	Book Cases.		Black boards.	Clocks.	Organs.	Pianos.	Wardrobes	Umbrella stands.	Wash stands.	Tables.	Furnaces.	Stoves.	Screens.	Estimated Valuation.
						Large.	Small.												
Baltimore City College	593	56	78	16	130	19	1	16	13	1	1	2	.....	.....	8	4	....	.....	$6,850 00
Eastern Female High	356	25	84	24	125	7	.....	22	3	....	2	....	.....	.....	12	4	2	2	5,340 00
Western Female High	418	32	159	15	115	14	7	32	2	1	1	....	.....	.....	9	5	1	1	4,715 00
Balto. Polytechnic Ins.	256	46	.....	12	954	14	.....	wall	13	1	....	....	.....	.....	16	2	....	.....	5,356 00
Colored Manual Training	109	12	.....	11	67	8	6	25	1	....	....	1	.....	.....	1	....	15	22	900 00
Male Grammar	5,092	735	23	204	572	50	159	391	30	22	....	21	30	21	17	48	78	133	41,175 00
Female Grammar	4,782	668	92	174	573	44	151	354	23	17	4	23	39	20	18	10	74	131	35,180 00
English-German	2,724	370	2	109	224	11	70	167	8	7	....	12	9	6	10	14	30	38	18,215 00
Male Primary	6,627	1067	34	251	817	46	204	550	36	31	1	37	52	23	30	37	147	244	51,015 00
Female Primary	6,284	974	75	236	729	42	186	522	40	32	....	30	41	26	27	...	132	232	42,695 00
Colored	3,856	646	24	162	466	40	129	342	26	21	....	21	26	16	19	26	87	150	30,060 00
	31,097	4631	571	1214	4772	295	913	2421	195	133	9	147	197	112	167	150	566	953	$247,081 00
Annex Schools	4,187	633	.....	151	441	18	99	221	23	8	1	15	33	14	14	5	85	142	30,060 00
Totals	35,284	5264	571	1365	5213	313	1012	2642	218	141	10	162	230	126	181	155	651	1095	$277,141 00

PAPERS RELATING TO BALTIMORE CITY COLLEGE.

FACULTY.

FRANCIS A. SOPER, A.M., PRINCIPAL,
Professor of Higher Mathematics.

CHARLES F. RADDATZ, VICE-PRINCIPAL,
Professor of the German Language.

A. L. MILLES, B.A.,
Professor of the French Language and Adjunct Professor of Latin.

POWHATAN CLARKE, M.D.,
Professor of Natural Sciences.

CHARLES C. WIGHT,
Professor of English Literature and History.

RICHARD W. PREECE,
Professor of Drawing.

A. Z. HARTMAN, A.M.,
Professor of Latin and Greek.

J. N. HANK, A.M.,
Professor of Latin and Mental Philosophy.

JOSEPH H. ELLIOTT, SECRETARY OF FACULTY,
Professor of Book-keeping and Penmanship.

S. F. NORRIS,
Professor of Astronomy and Mathematics.

ROBERT C. COLE, A.M.,
Professor of History and Political Economy.

ALEXANDER HAMILTON,
Professor of English and Mathematics.

G. EMORY MORGAN, A.M.,
Professor of Latin and English Literature.

PHILIP H. FRIESE,
Adjunct Professor of Natural Sciences and English.

JULIUS G. MILLER,
Adjunct Professor of Mathematics and Latin.

CURRICULUM.

FIRST YEAR.

History of United States,
History of England,
Writing,
Composition,
Drawing,
Natural Philosophy,
English Literature,
Latin,
Book-keeping,
Algebra,
Geometry.

SECOND YEAR.

Composition,
English Literature,
Book-keeping,
Natural Philosophy,
Drawing,
Latin,
German,
Geometry,
History of Rome, and Constitution of Maryland,
Mensuration,
Elocution,
Rhetoric.

THIRD YEAR.

Composition and Elocution,
English Literature,
Drawing,
Latin,
Chemistry,
Review of Mathematics,
History of Greece and Eastern Nations,
German,
Greek (optional),
French,
Trigonometry and applications.

FOURTH YEAR.

English Literature and essays,
Chemistry,
Latin,
Greek,
French,
Surveying and Navigation,
German,
Drawing,
Analytical Geometry,
Astronomy,
Civil Government,
Composition,
Elocution.

FIFTH YEAR.

Latin,
Greek,
Calculus,
English Literature and essays,
Mental Philosophy,
Political Economy,
French,
German,
Chemistry,
Astronomy,
Drawing,
Elocution.

RECITATIONS.

107th and 108th Terms.

RECITATIONS HEARD EACH WEEK BY THE RESPECTIVE PROFESSORS.

PROF. SOPER—Calculus, 4 times; Analytical Geometry, 6 times; Preparation, 4 times 14

PROF. RADDATZ—German, 21 times; English History, 2 times; Preparation, 1 time 24

PROF. MILLES—Latin, 9 times; French, 15 times 24

PROF. CLARKE—Natural Philosophy, 6 times; Chemistry, 18 times... 24

PROF. WIGHT—English Literature, 15 times; Rhetoric, 9 times..... 24

PROF. PREECE—Drawing, 22 times; Preparation, 2 times..... 24

PROF. HARTMAN—Greek, 12 times; Latin, 12 times..... 24

PROF. HANK—Latin, 20 times; Mental Philosophy, 2 times; Preparation, 2 times..... 24

PROF. ELLIOTT—Book-keeping, 19 times; Writing, 5 times..... 24

PROF. NORRIS—Trigonometry, 12 times; Astronomy, 3 times; Surveying and Navigation, 4 times; Review Mathematics, 4 times; Preparation, 1 time..... 24

PROF. COLE—History, 20 times; Political Economy, 2 times; Civil Government, 1 time; Preparation, 1 time..... 24

PROF. HAMILTON—Geometry, 18 times; Algebra, 4 times; Preparation, 2 times..... 24

PROF. MORGAN—Latin, 10 times; English Literature, 10 times; Composition, 2 times; Preparation, 2 times..... 24

PROF. FRIESE—Composition, 9 times; Natural Philosophy, 10 times; History of U. S., 3 times; Preparation, 2 times..... 24

PROF. MILLER—Latin, 10 times; Algebra, 6 times; Composition, 2 times; Geometry, 4 times; Preparation, 2 times..... 24

CLASS RECITATIONS.

Recitations Made Each Week by the Different Classes.

Fifth Year.—J.—Calculus. 4; French, 2; German, 2; Chemistry, 3; English, 3; Drawing, 1; Latin, 4; Mental Philosophy or Greek, 2; Astronomy, 1; Political Economy or Greek, 2—24.

Fourth Year.—I^1 and I^2.—Analytical Geometry, 3; French, 2; German, 2; Chemistry, 3; English, 3; Drawing, 1; Latin, 4; Greek or Surveying and Navigation, 4; Astronomy, 1; Civil Government, 1—24.

Third Year.—H^1, H^2 and H^3.—French, 3; German, 2; Chemistry, 3; Rhetoric, 3; Drawing, 1; Greek or Review Mathematics, 4; Latin, 4; Trigonometry, 4; History Greece and Eastern Nations, 1—25.

Second Year.—B^1, B^2 and B^3.—German, 3; Physics, 2; English Literature, 2; Drawing, 2; Latin, 4; Book-keeping, 3; Geometry, 4; Composition, 1; History Rome and Constitution Maryland, 2—23.

First Year.—A^1, A^2, A^3, A^4 and A^5.—Latin, 5; History England, 2; Drawing, 2; Book-keeping, 2; Writing, 1; Geometry, 2; Algebra, 2; English Literature, 2; Physics, 2; Composition, 2; History U. S., 1—23.

ROLL FOR THE YEAR 1893.

Number of students on roll December 31, 1892.	463
Number admitted by promotion during 1893..	246
Number admitted from private schools during 1893	16
Whole number on roll during 1893	725
Number withdrawn during 1893	166
Number graduated in June, 1893	28
Number re-entered during 1893	8
Number on roll, December 31, 1893	539
Average attendance during 1893	431.3
Average number on roll during 1893	465.4
Percentage of attendance for the year	92.7
Number on roll June 30, 1893	385
Number of those who returned after summer vacation	310
Number of new students entered after September 11, 1893	258
Whole number on roll from September 11, to December 31, 1893	568
Number withdrawn from September 11 to December 31, 1893	29

GRADUATES.

Adams, Thomas Sewall
Armstrong, Horace
Beatty, Cornelius
Bonn, Anthony
Caspari, Charles Edward
Feig, Charles Bertram
Frank, Louis
Gantz, Albert Dale
Kurrelmeyer, William
Lanahan, Henry
Miller, Francis Marion
Myers, Charles Evers
North, Harvey Ward
Renshaw, Clarence
Rynehart, Henry Merryman
Sanders, Morgan
Sanford, John Lowry
Sickel, Edward
Sumwalt, John Wesley Richardson
Thomsen, William Edward
Torsch, Charles Burnet
Trippe, James McConky
Tyler, William Gurdon
Van Horn, William Oliver
Wallis, William Fisher
Warfield, Frederick Howard
Welbourn, John Armistead
Wolf, Isaac Stewart George

RECIPIENTS OF PEABODY PRIZES

OF THE FIRST GRADE—ONE HUNDRED DOLLARS EACH:

Harvey Ward North,
Henry Lanahan,
Charles Bertram Feig.

OF THE SECOND GRADE—FIFTY DOLLARS EACH:

John Wesley Richardson Sumwalt,
Clarence Renshaw,
William Kurrelmeyer,
James McConky Trippe.

RECIPIENT OF SHAKESPEAREAN PRIZE:

James McConky Trippe.

Papers Relating to Baltimore Polytechnic Institute.

FACULTY.

President,

JOHN W. SAVILLE, Engineer Corps, U.S.N.,

ENGINEERING.

Vice-President,

A. NEWTON EBAUGH, Ph.B.

HIGHER MATHEMATICS.

Instructor in Wood Working.

WILLIAM DUGENT,

PATTERN-MAKING AND WOOD-TURNING.

Instructor in Metal Working,

WILLIAM G. RICHARDSON,

MACHINE SHOP AND FINISHING.

Instructor in Academic Department,

WILLIAM H. HALL,

CHEMISTRY AND PHYSICS.

Instructor in Academic Department,

J. WARD WILLSON, M.D.,

ANATOMY, PHYSIOLOGY AND GEOGRAPHY.

Instructor in Metal Department,

ALBERT McCLEAN,

FORGE SHOP.

Instructor in Academic Department,

B. WHEELER SWEANY,

GEOMETRICAL AND MECHANICAL DRAWING.

Instructor in Academic Department,
JOHN L. YATER, JR.,
ARITHMETIC.

Instructor in Wood Department,
*THOMAS G. FORD,
CARPENTRY AND WOOD CARVING.

Instructor in Metal Department,
JOHN T. ROBINSON,
SHEET METAL WORK.

Instructor in Academic Department,
RICHARD H. UHRBROCK,
ALGEBRA.

Instructor in Wood Department,
*GEORGE M. GAITHER,
CARPENTRY.

Instructor in Academic Department,
EDWARD S. KINES,
HISTORY, ENGLISH AND ORATORY.

Instructor in Academic Department,
*WARREN S. SEIPP,
FREE HAND DRAWING.

Instructor in Academic Department,
F. D. J. KAESSMANN,
GERMAN.

Instructor in Academic Department,
JOSEPH F. McBEE,
HISTORY AND PENMANSHIP.

Instructor in Metal Department,
N. D. D. SOLLERS,
SHEET METAL WORK.

*Graduates of this School.

THE COURSE OF STUDY. (General.)

The combined course of study covers three years, and the school time of the students is about equally divided between mental and manual exercises. One hour per day is given to drawing, one hour and a half to shop-work, and three hours to the usual academic studies.

The course of study embraces five parallel lines, as follows:

First—A course in English and German Language and Literature; Composition, Social Science and History.

Second—A course in Science and applied Mathematics, including Geology, Physics, Chemistry, Physiology, Mensuration, Book-keeping and Engineering.

Third—A course in pure Mathematics, including Arithmetic, Algebra, Geometry and Trigonometry.

Fourth—A course in Free Hand, Architectural and Mechanical Drawing, Designing and Penmanship.

Fifth—A course in tool instruction, including Carpentry, Wood-Carving, Wood-Turning, Pattern-Making, Moulding, Soldering, Brazing, Vise and Machine-shop work, Printing; care and management of steam engines and boilers, and military drill. There are also a post-graduate course in Mechanical Engineering, and a Preparatory Department.

GRADUATES.

Ackerman, Theodore Henry
Addison, Herbert
Benson, Oregon R., Jr.
Blogg, Percy Thayer
Carson, C. Raymond
Cochran, William James
D'Yarmett, Edward Charles
Fitzhugh, Henry Maynadier, Jr.
Hand, Clarence Smith
McShane, James Erancis
Morfit, Clarence Mason
Phelps, Frank Hart
Schenck, Edwin, Jr.
Uhler, John Ridgely
Van Horn, Lee Ismy
Weishampel, Charles P.
Williams, Ralph Leon

RECIPIENT OF ALUMNI MEDAL,

HERBERT ADDISON.

RECIPIENT OF STEAM ENGINEERING MEDAL,

EDWIN SCHENCK, JR.

—ROLL.—

Number of students on roll December 31, 1892		385
Number of students admitted from public schools		190
Number of students admitted from private schools		167
Total number in the school during the year		742
Number withdrawn during the year	240	
Number graduated	16	
		256
Number now on roll		486
Average enrollment during the year		405
Percentage of attendance for the year		94.6

Papers Relating to the Eastern Female High School.

FACULTY.

WILLIAM F. WARDENBURG,
Astronomy, Book-keeping, Trigonometry.

MARY C. GEDDES,
Geometry, Composition, Mental Philosophy.

LAURA V. DEVALIN,
English Literature, Composition, History.

ELIZA E. NICOLAI,
Natural Philosophy, Composition.

M. MATILDA MULLIN,
Drawing.

LEONORA E. CARPENTER,
History, Composition, Latin.

SUE M. LOHRFINCK,
Elocution, Composition, Physiology.

MARY C. BASIL,
Composition, History, Algebra, Geometry.

KATE M. LEWIS,
Algebra, Composition, Geometry.

THEODOCIA B. MAHON,
Algebra, Composition, Geometry.

MARGARET GARRETT,
History, Composition, Literature.

ANNA B. DIETRICHS,
German.

MARGARET D. KELLUM,
Composition, Geometry, Latin.

J. HARRY DEEMS,
Music.

GRADUATES.

Ackler, Margaret E. H.
Bailey, Susanna
Barton, Laura G.
Bowman, Blanche I.
Bucher, Alice G.
Burger, Magdalene H.
Carroll, Katharine J.
Cooper, Alice E.
Corner, Ida E.
Curley, Emma Stewart
Daiger, Florence
Davis, J. Alberta
Denny, Marion E.
Disney, Ethel I.
Disney, Mabel E.
Evans, H. Irene
Frey, Cora E.
Goetz, Margaret
Hancock, Mary A.
Heede, Lucie N.
Hopkins, S. Josephine
Huber, Emma W.
Hubert, Louisa
Hunter, Bella S.
Hutton, A. Giralda
Johnson, Blanche M.
Kenly, Laura Hook
Kimmerle, Minnie
Krebs, Julia I.
Langlotz, Laura V.
Larkin, Grace A.
Larmour, M. Theresa
Leech, Susie Blanche
Lorman, Ida Gertrude
Louis, Isabel
Lovering, Anna M.
Madden, Ella M.
Madden, Julia C.
Mayer, Lily
McCullough, Anna Belle
Miller, Julia L.
Montgomery, Mary A.
Morrow, Grace Margaret
Otto, Lillia Belle
Otto, Margaret
Patterson, M. Rose
Phillips, Mary A.
Reichel, Louisa D.
Rosenthal, Flora W.
Sagle, Fannie May
Sanner, Marian
Shaffer, Sara A.
Shelley, Linnie S.
Smith, Kate Soper
Smith, Vallie E.
Stehley, Katharine M.
Strebeck, Hattie Belle
Sutherland, M. Elsie
Utermohle, Laura A.
Vavrina, Barbara
Ward, Eva C.

RECIPIENTS OF PEABODY MEDALS.

FIRST GRADE.

H. Irene Evans, Fannie May Sagle, Vallie E. Smith,
Margaret Goetz, Flora W. Rosenthal.

SECOND GRADE.

Katharine J. Carroll, Julia L. Miller, J. Alberta Davis,
M. Rose Patterson, Lily Mayer, Laura V. Langlotz,
Lucie N. Heede, Marie Theresa Larmour, Isabel Louis,
Louisa D. Reichel.

ADDITIONAL NUMBER RECEIVING TICKETS TO PEABODY LECTURES.

Ida G. Lorman, Magdalene H. Burger, Ethel I. Disney,
Sara A. Shaffer, Hattie B. Strebeck, Laura H. Kenly,
Barbara Vavrina, Mary A. Phillips, Florence Daiger,
Emma S. Curley.

ROLL.

Number of pupils on roll December 31, 1892	427
Admitted from public schools by promotion	144
Admitted from private schools by examination	8
Re-entered	3
Admitted by transfer	2
Total number in school during the year	584
Average enrollment	423
Average attendance (93 per cent)	394
Number withdrawn during the year	77
Number graduated	61
Number now on roll	446

Class Recitations.

RECITATIONS MADE EACH WEEK BY THE DIFFERENT CLASSES.

L, M.—Mental Philosophy, 3; Trigonometry, 3; History, 2; Elocution, 1; Drawing, 2; Music, 2; Composition, 1; Astronomy, 3; German, 3; Latin, 5—25.

I, K.—English Literature, 2; Elocution, 1; Algebra, 2; History, 2; Geometry, 3; Book-keeping, 2; Drawing, 2; Music, 2; Composition, 1; German, 3; Latin, 5—25.

E, F, G.—Algebra, 3; Composition, 2; Drawing, 2; Elocution, 1; Geometry, 3; German, 3; History, 2; Literature, 3; Natural Philosophy, 2; Vocal Music, 2; Latin, 2—25.

A, B, C, D.—Literature, 3; Elocution, 1; Algebra, 5; Natural Philosophy, 3; Drawing, 2; Music, 2; Composition, 2; History, 2; Physiology, 2; Geometry, 3—25.

COURSE OF STUDY

— IN THE —

FEMALE HIGH SCHOOLS.

FIRST YEAR.

Algebra,
Composition,
Drawing,
Elocution,
Geometry,
History,
Literature,
Natural Philosophy,
Physiology,
Vocal Music.

SECOND YEAR.

Algebra,
Composition,
Drawing,
Elocution,
Geometry,
German,
History,
Latin,
Literature,
Natural Philosophy,
Vocal Music.

THIRD YEAR.

Algebra,
Book-keeping,
Composition,
Drawing,
Elocution,
Geometry,
German,
History,
Latin,
Literature,
Vocal Music.

FOURTH YEAR.

Astronomy,
Composition,
Drawing,
Elocution,
German,
History,
Latin,
Mental Philosophy,
Trigonometry,
Vocal Music.

Papers Relating to the Western Female High School.

FACULTY.

ANDREW S. KERR, PRINCIPAL.
Latin, Trigonometry.

PAMELA A. HARTMAN.
English Literature, Mental Philosophy, Composition.

SARA S. RICE,
Elocution, Literature, Composition.

JANE S. WILLIAMS,
Algebra, Astronomy, History, Composition.

EMMA COWMAN.
Natural Philosophy, Literature, Physiology, Composition.

HENRIETTA C. ADAMS,
History, Composition.

LOUISA C. SAUMENIG,
Geometry, Book-keeping, Composition.

ANNA P. TUDOR,
Latin, Geometry.

ANNIE O. SOLLERS,
Geometry, Natural Philosophy, Literature, Composition.

MARY H. THOMIZ,
Physiology, Algebra, Composition.

BESSIE G. THOMSON,
Algebra, History, Drawing, Composition.

ELIZA J. DAVIS,
Drawing.

FRANCES A. CASPARI,
German.

JOHN G. WEHAGE,
Vocal Music.

GRADUATES.

Aitken, Mary H.
Atkinson, Marcella
Ballard, Gertrude E.
Bamberger, Stella
Bayly, Roberta
Bergman, Zipporah
Buck, Beulah M.
Cauthorn, Alice Haile
Christian, Elizabeth B.
Cohen, Ray
Collins, Sue
Cook, Mollie
Daniel, Hattie
Dietz, M. Cecilia
Diffenderfer, Melvina
Duval, Lilian W.
Ebert, Sophie
Etheredge, Carrie B.
Fiske, Jennie L.
Fry, Grace I.
Gallagher, Katherine G.
Gardner, Rosalie E.
Gray, Ethel Rodgers
Gray, Isabel Pinkney
Greenwood, Mary Kate
Harrison, Georgia T.
Hess, Amelia F.
Hollstein, Susie H.
Ireland, Grace
Jaeger, Margaret I.
Kearney, M. Rose
Kelly, Mary
Kidd, Evelyn Suter
Krager, Virginia H.
Landsdowne, Mary Lloyd
Loane, May Belle
Lyon, Madge Netherclift
Magee, Elizabeth B.
Mann, Gertrude Watkins
Marchant, Mary Boyd
Martin, Maude
Matthews, Grace F.
Meikle, Clara M.
Milbourne, Grace Marie
Millikin, Janie
Moore, Emma
Poulton, Mary Lee
Riggans, Grace A.
Rogan, Florence G.
Sanders, Grace S.
Smith, Florence E.
Smith, Lelia H.
Spengler, Lena L.
Sterling, Florence A.
Stromberg, Helen
Szold, Adele
Tolson, May
Vail, Bessie K.
Wallace, M. Roberta
Waters, Margaret
Wehage, Anna M.
Welsh, Maggie E.
White, Daisy F.
Winternitz, Helen
Wright, Mary

RECIPIENTS OF PEABODY MEDALS.

FIRST GRADE.

Isabel Pinkney Gray,
Rosalie E. Gardner,
Rachel Cohen,
Alice Haile Cauthorn,
Adele Szold.

SECOND GRADE.

Lilian W. Duval,
Madge Netherclift Lyon,
Daisy F. White,
Anna M. Wehage,
Grace A. Riggans,
Mary Wright,
Grace F. Matthews,
Susie H. Holstein,
Mary Lee Poulton,
Helen Stromberg.

ADDITIONAL NUMBER RECEIVING TICKETS TO LECTURES AT PEABODY INSTITUTE.

Sophia Ebert,
May Tolson,
Beulah M. Buck,
Maude Martin,
Maggie E. Welsh,
M. Roberta Wallace,
Grace S. Sanders,
Zipporah Bergman,
Clara M. Meikle,
Mary Boyd Marchant.

ROLL.

Grammar school pupils recommended for admission in June	281
Private school pupils examined for admission in September and October	17
Private pupils admitted upon examination	13
Grammar school pupils who failed to enter in September	41

The roll of the school after organization in the fall was made up as follows:

Returned after the summer vacation	286
Re-entered	11
Admitted from grammar schools	240
Admitted from private schools	13
Admitted by transfer	3
Total	555

The change in the numerical condition of the different classes is shown in the following table:

	4th Yr.	3d Yr.	2d Yr.	1st Yr.	Total.
On roll December, 1892	65	69	139	208	477
On roll June, 1893	65	65	113	149	392
Graduated June, 1893	65	..	...	...	65
On roll September, 1893	60	86	126	283	555
On roll December, 1893	59	82	121	268	530

CLASS RECITATIONS.

Recitations Made Each Week by the Different Classes.

M^1 AND M^2 CLASSES.—Astronomy, 3; Composition, 1; Drawing, 2; Elocution, 1; German, 3; History, 2; Music, 2; Mental Philosophy, 3; Trigonometry, 3; Latin, 5.

L AND K CLASSES.—Algebra, 2; Book-keeping, 2; Composition, 1; Drawing, 2; Elocution, 1; Geometry, 3; German, 3; History, 2; Literature, 2; Music, 2; Latin, 5.

I, H AND G CLASSES.—Algebra, 3; Composition, 2; Drawing, 2; Elocution, 1; Geometry, 3; German, 3; History, 2; Literature, 2; Physics, 3; Music, 2; Latin, 2.

F, E, D, C, B AND A CLASSES.—Algebra, 5; Composition, 2; Drawing, 2; Elocution, 1; History, 2; Literature, 3; Physics, 3; Physiology, 2; Music, 2; Geometry, 3.

Papers Relating to Colored High School.

FACULTY.

GEORGE LEWIS STALEY, PRINCIPAL,
Latin, Mental Philosophy, Moral Science, Astronomy, Physiology.

BESSIE L. RICE,
Elocution, Literature, Trigonometry, Natural Philosophy, History, Composition, Music, Etymology.

MARY E. HUDGINS,
History, Composition, Grammar, Rhetoric, Geometry.

NELLIE M. O'CONNOR,
Arithmetic, Algebra, Grammar, Natural Philosophy, Etymology, Literature, Book-keeping.

OLIVIA F. KEACH.
Drawing.

GRADUATES.

*ANDERSON, EMMA.
BROWN, PAULINE,
FOSSETT, ADELAIDE,
GRAY, FLORENCE,
JOHNSON, CELIA,
RAYNOR, CARRIE,
STEWART, SUSIE.

*Died April 19, 1893.

ROLL.

Number of pupils on roll December 31, 1892	73
Admitted from public schools	44
Admitted from private schools	1
Re-entered	1
Admitted by transfer	0
Total number in school during the year	119
Number withdrawn during the year	8
Number graduated	7
Number now on roll	104

Class Recitations.

Recitations Made Each Week by the Different Classes.

Fourth Year.—Mental Philosophy, 2; Trigonometry, 2; History, 3; Literature, 2; Grammar, 2; Elocution, 2; Drawing, 1; Latin, 3; Music, 1; Composition, 1; Astronomy, 2; Moral Science, 1; Algebra, 2; Study, 1—25.

Third Year.—Natural Philosophy, 2; Literature, 2; Rhetoric, 2; Elocution, 1; Algebra, 2; History, 3; Geometry, 2; Drawing, 1; Latin, 3; Music, 1; Composition, 1; Grammar, 2; Book-keeping, 2; Study, 1—25.

Second Year.—Algebra, 2; Arithmetic, 2; Composition, 1; Drawing, 1; Latin, 3; Geometry, 2; History, 3; Literature, 3; Natural Philosophy, 2; Rhetoric, 2; Music, 1; Etymology, 1; Grammar, 1; Elocution, 1—25.

First Year.—Etymology, 2; Literature, 2; Elocution, 1; Algebra, 2; Arithmetic, 2; Physiology, 1; Natural Philosophy, 2; Drawing, 1; Music, 1; Composition, 1; History, 3; Latin, 4; Grammar, 2; Study, 1—25.

COURSE OF STUDY

— IN THE —

COLORED HIGH SCHOOL.

FIRST YEAR.

Etymology,
Literature,
Elocution,
Algebra,
Arithmetic,
Physiology,
Natural Philosophy,
Drawing,
Music.
Composition,
History,
Latin.
Grammar.

SECOND YEAR.

Algebra,
Composition,
Latin,
History,
Rhetoric,
Music,
Arithmetic,
Drawing,
Geometry,
Literature,
Natural Philosophy,
Etymology,
Grammar,
Elocution.

THIRD YEAR.

Literature,
Rhetoric,
Algebra,
History,
Drawing,
Music,
Natural Philosophy,
Elocution,
Geometry,
Latin,
Composition,
Grammar,
Book-keeping.

FOURTH YEAR.

Mental Philosophy.
History,
Literature,
Grammar.
Latin,
Composition,
Moral Science,
Trigonometry,
Algebra,
Elocution,
Drawing,
Music,
Astronomy.

Papers Relating to Colored Manual Training School.

FACULTY.

Acting Principal,

WILLIAM R. RYAN,

DRAWING AND ENGINEERING.

First Assistant,

SAMUEL T. LESTER,

HIGHER MATHEMATICS AND ENGLISH.

Instructor in Academic Department,

SAMUEL M. NORTH,

SCIENCE AND ENGLISH.

Instructor in Wood Working,

CHARLES J. P. SCHMIDT,

CARPENTRY, PATTERN MAKING AND WOOD TURNING.

Instructor in Metal Department,

JOHN E. AULD,

FORGE SHOP.

Instructor in Metal Working,

WILLIAM A. JONES,

MACHINE SHOP AND FINISHING.

THE COURSE OF STUDY. (General.)

The complete course of study covers three years, and the school time of the students is about equally divided between mental and manual exercises. One hour per day is given to drawing, two hours to shop work, and two and a-half hours to the usual academic studies.

The course of study embraces five parallel lines, as follows:

First:—A course in English Language and Literature; Composition, U. S. Constitution and Civil Government, and Ancient and Modern History.

Second:—A course in Science and applied Mathematics, including Geology, Physics, Chemistry, Physiology, Mensuration, Book-keeping, Commercial Business, Type-writing, and Engineering.

Third:—A course in pure Mathematics, including Arithmetic, Algebra, Geometry and Trigonometry.

Fourth:—A course in Free Hand, Architectural and Mechanical Drawing, Designing and Penmanship.

Fifth:—A course of tool instruction, including Carpentry, Wood-carving, Wood-turning, Pattern-making, Moulding, Soldering, Brazing, Vise and Machine shop work, care and management of steam engines and boilers, and military drill.

ROLL.

Number of Students on roll December 31, 1893..	93
Number of students admitted from public schools.	46
Number of students admitted from private schools	00
Total number in school during the year....	139
Number withdrawn during the year.....	52
Number now in school.....	87
Percentage of attendance for the year.....	84.5

Grades for Primary Schools.

(September, 1885.—As Amended to April, 1894.

FIRST GRADE, FIRST YEAR.

READING.—First half year.—Use objects or pictures, blackboard, slates, Fisher's card and reading chart. From the beginning lead the pupils to associate words with the things, qualities, or actions of which they are the representatives. First present the object to their attention and then the word that names it. After a few simple words have been learned in this way, combine each object-word with other simple words to form sentences which the pupils are to be taught to read. Continue this exercise with a series of simple object-words. In all new sentences present repetitions of word-forms previously learned and introduce new words gradually. Teach writing from the first, beginning with small letters of the simplest forms, as wholes, and afterward combining the letters to form simple words. Give much repetition in new combinations of letters previously learned. Use the reading chart after the written forms of a few words have been thoroughly taught. Begin with script instead of printed words.

Second half year.—American Educational Reader No. 1. Supplementary reading to repeat word-forms in new sentences. Continue to practice writing words and sentences and reading them. In this and all subsequent reading work take special care to see that the thought to be expressed is in the mind of the pupil before requiring him to read aloud. Insist upon a distinct and audible utterance, and correct pronunciation. Pupils must not be permitted to acquire the habit of drawling or reading disjunctively. Teach them to see whole phrases and to speak them as wholes. The articles *a*, *an* and *the* and the unemphasized little words *in* and *to*, etc., should be pronounced as unemphasized prefixes. For example, *a float*, *a boat*, should be spoken as single words, like *afloat*, *about*, etc. Never allow the too common fault of hesitating in learning to read. Make the pupils familiar with the matter of each reading lesson by conversation and explanation, so as to lead them to read it at sight. To this end the new words of each lesson should be written on the blackboard and fully explained. The pupils should also be required to copy them into sentences before allowing them to read the lesson. Oral spelling from the reading lesson.

Arithmetic.—First half year.—Teach numbers from one to twenty. Second half year.—Teach to one hundred. Develop the *idea* of number, as wholes; with objects, numeral frame, marks, etc. While doing this do not at first permit the pupil to *count* unless the objects to be counted are actually present. Treat each number above one with all possible combinations of the preceding numbers to produce it by adding, and with its separations by subtracting them from it—

First. With objects, numeral frame, marks, etc., without figures.

Second. With objects and figures.

Third. Mentally with abstract numbers.

Fourth. With simple practical examples.

Train the pupils to recognize the number at sight without conscious effort at counting, as they recognize the words, *day*, *man*, etc. Encourage the children to talk, but require their answers to be full and complete sentences.

Miscellaneous examples for rapid solution by adding and subtracting.

Appleton's First Lessons in Numbers to be used in oral teaching in all the grades. Follow closely the methods of the author, intended to develop arithmetical knowledge.

Slate Work.—First half year.—Addition, the result to be no greater than 20; second half year, no greater than 100. Teach coins from one cent to twenty, inclusive; pint; quart; inch.

In advanced classes of this grade, the teacher is expected to carry the pupils as far as the condition of the class will warrant. Such a class, properly graded, should be able to accomplish the work of the first half year of the second grade.

Language.—Purpose: to accustom pupils to express what they know in correct forms of speech. Oral exercises from objects and pictures connected with the reading and observation lessons, including the lessons in numbers and whatever the ingenuity of the teacher may suggest.

Penmanship.—Begin with the thirteen small letters, combining them into short, easy words. Be careful that the copies set are in good writing. After the pupils are able to write fairly well exercise them in copying easy sentences. Require them to read what they have written. The idea of form and symmetry is to be required at this point, rather than the making of nice lines. The copying of printed forms from books as an exercise must not be allowed.

Drawing.—One hour per week. The position of points, then of straight lines, with the names and shapes of the simplest geometric forms, and the drawing of objects based on these forms, also the bisection of lines.

Music.—As prescribed for the grade.

SECOND GRADE. SECOND YEAR.

READING AND SPELLING.—American Educational Reader No. 2. Supplementary reading. Exercises in articulation and pronunciation. Written and oral spelling from the reading lessons. A few short pieces of suitable poetry carefully learned and frequently recited. Require the pupil to write the words before spelling them orally by letters. Accustom pupils in written spelling to recognize all the characters in the word-forms, such as the *apostrophe*, etc. Require them to memorize the alphabet as an acquisition for future use. Observe directions in previous grade.

ARITHMETIC.—Combinations and separations of numbers to one thousand. Adding, subtracting and multiplying—

First. Without figures.

Second. With figures, using no amounts or minuends greater than one thousand, or multipliers greater than nine. Roman numerals to C.

Coins continued. Pint, quart, gallon. Pint, quart, peck and bushel. Hour, day, week, month and year. Dozen. Inch, foot and yard. Ounce and pound.

SLATE WORK.—Write and read numbers containing six figures. Addition, subtraction and multiplication with not more than three figures as a multiplier. Simple practical problems. Teach well the multiplication table through 9x12. Illustrate the construction of the table with objects, the numeral frame, etc. Give oral drills in rapid combinations of numbers.

LANGUAGE.—The work of first grade continued. Short stories told or read to the pupils, and reproduced by them orally. Pupils to give expression to thoughts suggested by objects and pictures or by observation lessons.

PENMANSHIP.—First half year.—Review the writing of the small letters, and teach the writing of all the capitals and all the marks of punctuation. Give daily practice in writing words and sentences taught in the language and reading lessons. Give exercises in writing from dictation and transforming printed language into script. Accept no careless work.

Second half year.—Practice in movements of the arm, hand and fingers with the pen held correctly, using suitably ruled copy-books for such work—

First. Copying from the black-board or from slips.

Second. Writing selections in script from the reading book.

Third. Words, phrases, sentences and short stories from dictation.

DRAWING.—One hour per week. Books with straight line designs are provided, additional forms taught, with the tri-section of lines.

MUSIC.—As prescribed for the grade.

THIRD GRADE. THIRD YEAR.

READING.—American Educational Reader No. 3. Exercises in articulation and pronunciation. Written and oral spelling selected from the American Educational Reader No. 3. A few appropriate selections of poetry carefully read, learned and frequently recited. Observe directions in previous grades.

ARITHMETIC.—The text book in this grade is to be used for *reading* and *thinking* as well as for drill work.

Writing and reading integers to and including millions. Miscellaneous exercises in addition, subtraction, multiplication and division of integers. In long division, the divisor not to exceed four figures.

Multiplication table reviewed and continued through 12 x 12. Roman numerals to M, and ordinal numbers as needed in connection with the reading and other lessons.

Coins previously studied and paper currency. Second, minute, hour, day, week, month and year. Time of day by the clock. Units of dry and liquid measure previously studied, thoroughly reviewed. In this grade the ground rules—addition, subtraction, multiplication, and division—thoroughly reviewed; collateral practice with exercises for rapid execution—adding columns of figures, etc.

PENMANSHIP.—Practice in movements of the arm, hand and fingers with the pen held correctly. Use practice paper one hour a week. One writing book or its equivalent, completed each half year. Copying from the blackboard. Writing selections and dictation exercises in blank books.

LANGUAGE.—Work of second grade continued with oral and written exercises, short stories read silently and then reproduced orally and in writing; stories written from pictures; letter writing begun.

GEOGRAPHY.—Second half year.—Give conversational lessons on plants, animals, people of different countries and climates, traveling by land and water, etc. Teach the natural divisions of land and water. Cardinal points of the compass. Names of the hemispheres, continents, oceans and grand divisions. General idea of our own country, state and city. Make the study interesting to the pupils, and endeavor by all means to create in their minds clear conceptions of geographical terms. Use the lessons of the book as reading and thinking lessons. All terms and definitions should be learned with accuracy after they are clearly understood. Examination in this study taken from sections (1) Direction, (2) Distance and Measuring, (3) Using a Scale, (4) Natural Divisions, (5) Township, City Schools, (6) Climate, (10) Occupations of Men, (11) Government, and (13) Shape of the Earth.

DRAWING.—One hour per week. The circle and its parts, the ellipse and oval, with flat copies and object lessons based upon the above forms.

MUSIC.—As prescribed for the grade.

In all the grades make a list of words that pupils most frequently mispronounce, and drill them in their correct pronunciation; also give frequent and thorough drill upon words containing the vowel sounds properly grouped and arranged.

Particular attention should be paid to addition in all the grades. See that pupils perceive readily the sum of integers without resorting to the counting process.

Lessons to develop ideas of

(1) *Color.*—Red, orange, yellow, etc.
Form.—Sphere, cylinder, cube, etc.
Place.—On, above, under, before, etc.
Size.—Large, small, great, little, etc.
Qualities of objects.—Rough, smooth, sweet, etc.
(2) *Lessons on the human body.*—Parts, use and movements, etc.
(3) *Familiar plants.*—Flower, leaf, stem, root, etc.
Animals.—Cat, dog, horse, cow, etc.
Things.—Objects in the school room, etc.

The lessons on this subject should be purely oral, with conversational illustrations. One hour a week, at such times as may be most suitable.

Principals are authorized and expected to promote to higher grades during the year such pupils as shall evince ability to pursue the studies of the higher grades.

In this course of study more attention should be given to language and reading than to abstract work; and it is expected that principals will see that their assistants understand and follow closely the directions given in the present schedule.

The preceptive faculties should be brought into prominent exercise, as this is the law of childhood and youth. The disposition to discover impels them to activity. Hence the teacher to be successful with children, must accustom them *to do* and discover for themselves. Train the eye to see, the ear to hear, the hand to do, and through these the mind to think.

Grades for Grammar Schools.

(September, 1886.—As Amended to April, 1894.)

FOURTH GRADE. FOURTH YEAR.

LANGUAGE.—Newell's Third Reader. At least five exercises of an hour each per week. Spell the words contained in the first half of Newell's Third Reader. Composition at least once a week—mistakes carefully corrected and explained. Letter-writing. Abstracts of lessons, stories, etc.—orally and in writing. Capitalization and punctuation. Correction of faulty expressions (oral and written), and mispronunciations. Develop a knowledge of the parts of speech, the subject nominative, the predicate verb, and the objects of verbs and prepositions, through the study of the simple sentence. Supplementary reading. One writing book or its equivalent completed each half year. Recitation of appropriate selections.

HISTORY.—First half of Eggleston's First Book of American History.

ARITHMETIC.—Written and mental. Addition, subtraction, multiplication and division of U. S. money (no decimal divisors or multipliers). Denominations, *in common use*, of dry measure, long measure, liquid measure, and time, with examples involving their practical application. Common fractions to multiplication. Endeavor to make pupils quick and accurate in working examples in the simple rules.

GEOGRAPHY.—Elementary. New England States and North America. Draw, from memory, map of North America. Frequent drills upon the outline maps.

DRAWING.—One hour per week. Review the work of the preceding years—more attention being given to accuracy of form and finish.

MUSIC.—As prescribed for the grade.

SCIENCE.—Dulany's Health Primer. To be used as a supplementary reader.

FIFTH GRADE. FIFTH YEAR.

LANGUAGE.—Newell's Fourth Reader. At least five exercises of one hour each per week. Supplementary reading. Spell the words in the speller from page 15 to page 31. Special attention to be given to correct forms of speech, both spoken and written. Exercises in composition, letter-writing, etc., the same in kind as those of the fourth grade, adapted to the capacity of the pupils of this grade—mistakes carefully corrected and explained. Continue the development of a knowledge of the parts of speech, through the study and analyzation of the simple sentence. Conjugation of verbs, in the indicative mode, active voice, simple form. Declension, person, and number. Pupils of this grade should understand the use of capitals, periods, the question mark, quotation marks, and should have some knowledge of the use of the comma and the apostrophe. One writing book or its equivalent, completed each half year. Recitations of appropriate selections.

HISTORY.—Second half of Eggleston's First Book of American History.

ARITHMETIC.—Written and mental. U. S. money. Common fractions and decimals. Continue the exercises involving the tables studied in the fourth grade. Explain at the blackboard how the common denominations of square measure are derived from those of long measure, and teach the denominations of square measure *in common use* with simple examples involving their practical application. Frequent practice in the four rules, especially addition.

GEOGRAPHY.—Elementary. Middle Atlantic States, United States, South America. Draw from memory, maps of Maryland and South America. Frequent drills upon the outline maps.

SCIENCE.—Dulany's Physiology. To be used as a supplementary reader.

DRAWING.—One hour per week. The simplest "working drawings" introduced, and more attention given to sketching leaves and fruit from nature, with the first steps in original design suggested.

MUSIC.—As prescribed for the grade.

SIXTH GRADE. SIXTH YEAR.

LANGUAGE.—Newell's Fourth or Fifth Reader. History of Maryland. Supplementary reading. At least five exercises one hour each per week. Spell the words in the speller from page 31 to page 46. The work

of the fifth grade in composition continued, including reproductions of lessons in reading, geography, history and physiology—mistakes carefully corrected and explained. Special attention to be given to correct forms of speech, both spoken and written. The study and analysis of simple and complex sentences. The gender, person, number, and case of nouns and pronouns; the classes of nouns and pronouns; the comparison of adjectives and adverbs; the voice, and conjugation of verbs. Punctuation. One writing-book or its equivalent, completed each half year. Recitation of appropriate selections.

History.—Eggleston's History of the United States to Chapter XXIII.

Arithmetic.—Written and mental. Compound numbers. Explain at the blackboard and by cubes how the common denominations of cubic measure are derived from those of long measure. Teach the pupils to perform with ease and accuracy operations in the simple rules and fractions. Practical examples involving the rules taught.

Algebra.—To page 46, section 80.

Geography.—Higher. Southern States. Central and North Central States. Europe. Draw, from memory, maps of Maryland and Europe. Frequent drills upon the outline maps.

Science.—Dulany's Physiology. One lesson a week. Teach the portions relating to hygiene and the nature of narcotics and alcoholic stimulants.

Drawing.—One hour per week. More attention is given to construction, and from these drawings the objects are made of paper or wood.

Music.—As prescribed for the grade.

SEVENTH GRADE. SEVENTH YEAR.

Language.—Newell's Fifth Reader, and the History of Maryland. Spell the words in the speller from page 46 to page 61. Supplementary reading. Constitution and Bill of Rights of Maryland to be used as supplementary reading at least once in two weeks. Reading compositions and other written exercises. Work of the preceding grades in composition continued, including descriptions, and abstracts of lessons in reading, geography, history and physiology. Business letters. The study and analysis of simple complex and compound sentences. Properties of the parts of speech continued:

voice, mode, tense, and the use of auxiliaries. Principles of syntax explained and illustrated. Paragraphing. Special attention to the correct forms of speech both spoken and written. Punctuation. One writing-book or its equivalent, completed each half year. Making out bills. Recitation of appropriate selections. Declamation.

HISTORY.—Eggleston's History of the United States to chapter XXXVII reviewing sixth grade.

ARITHMETIC.—Written and mental. Percentage, profit and loss, interest, ratio and proportion, discount and partnership. Practical business examples involving the rules which have been taught.

ALGEBRA.—To page 135.

GEOGRAPHY.—Rocky Mountain and Pacific States. Europe reviewed. Africa. Draw, from memory, maps of Maryland and Africa. Frequent drills upon the outline maps.

SCIENCE.—Dulany's Physiology. One lesson a week.

DRAWING.—One hour per week. Parallel perspective is taught in addition to construction and surface decoration.

MUSIC.—As prescribed for the grade.

EIGHTH GRADE. EIGHTH YEAR.

LANGUAGE.—Newell's Sixth Reader and the History of Maryland. Supplementary reading. Constitution of the United States and the Declaration of Independence to be used as supplementary reading at least once in two weeks. Reading original compositions. Work of the seventh grade in composition continued. Outlines prepared for original composition. The study and analysis of sentences continued. Properties and inflections of words. Principles of syntax. Paragraphing. Special attention to the correct forms of speech, both spoken and written. Common roots, prefixes and suffixes, and compounds. Exercises in writing to be connected with book-keeping and composition. Recitation of appropriate selections. Declamation.

HISTORY.—Complete Eggleston's History of the United States, reviewing the sixth and seventh grades.

Arithmetic.—Written and mental. Finish the book, giving particular attention to the subjects taught in the preceding grades, and the following: commission and brokerage, involution, evolution, mensuration, (in connection with this subject review square and cubic measure), single entry bookkeeping.

Algebra.—Teach through quadratic equations.

Geometry.—To book V, omitting book III.

Geography.—Asia, Oceania and Maryland. Draw, from memory, maps of Maryland and Asia. Frequent drills upon the outline maps.

Science.—First half year—Physics to acoustics. Second half year—Dulany-Martin's Human Body.

Drawing.—One hour per week. Angular, perspective and geometric work added to the subjects previously taught.

Music.—As prescribed for the grade.

GRADES IN GERMAN

—— FOR THE ——

ENGLISH-GERMAN SCHOOLS.

(March, 1886.—As Amended to April, 1891.)

N. B.—Classes in which Klemm's Text Books are still in use will follow the grading as prescribed for those books.

FIRST GRADE. FIRST YEAR.

READING AND SPELLING, (oral).—Goebel's First Reader, pages 1 to 24, (No. 47), inclusive.

WRITING.—Copy script letters, words and sentences from the blackboard.

LANGUAGE.—Refer to corresponding English grade.

MEMORIZING.—Appropriate selections.

SECOND GRADE. SECOND YEAR.

READING.—Goebel's First Reader, from page 24 to end. No. 14 (first division) and No. 3 (second division) optional.

SPELLING.—Goebel's First Reader, from page 27 to 48 inclusive.

LANGUAGE.—Refer to corresponding English grade.

MEMORIZING.—Appropriate selections.

THIRD GRADE. THIRD YEAR.

READING.—Goebel's Second Reader, pages 1 to 74 inclusive.

SPELLING.—Goebel's Second Reader, pages 1 to 39 inclusive.

LANGUAGE.—Refer to corresponding English grade.

Translation.—Exercises on pages 92–96.

Memorizing.—Appropriate selections.

Penmanship.—Taught in connection with written exercises.

FOURTH GRADE. FOURTH YEAR.

Reading.—Goebel's Third Reader, pages 1 to 76 inclusive.

Spelling.—Goebel's Third Reader, pages 1 to 47 inclusive.

Translation.—Exercises on pages 103–107.

Grammar.—The five declensions of nouns; comparison of the descriptive adjective and its declensions (in the pos. degree), when preceded by the article or a demonstrative or possessive adjective.

Language.—Refer to corresponding English grade.

FIFTH GRADE. FIFTH YEAR.

FIRST HALF YEAR.

Reading.—Kreis IV, pages 1–60.

Translation.—Exercises under IV, pages 1–21.

Grammar.—Declensions of adjectives finished; declension of personal pronoun; conjugation of ,,sein,'' ,,haben,'' ,,werden,'' (indicative), and prepositions governing the dative.

Language.—Refer to corresponding English grade.

Penmanship.—Taught in connection with written exercises.

SECOND HALF YEAR.

Reading.—Kreis IV, page 61 to end.

Translation.—Exercises under IV, pages 21–41.

GRAMMAR.—Review the preceding grades. Teach declension and use of relative and interrogative pronouns, entire conjugation of the auxiliaries and regular verbs, prepositions governing the accusative.

LANGUAGE.—Refer to corresponding English grade.

PENMANSHIP.—Taught in connection with written exercises.

SIXTH GRADE. SIXTH YEAR.

FIRST HALF YEAR.

READING.—Selections from Kreis V.

TRANSLATION.—From Kreis V, part second to page 123.

GRAMMAR.—Review. Teach separable, inseparable, reflective, impersonal and irregular verbs. Prepositions with genitive and dative, or accusative. Simple sentences.

LANGUAGE.—Refer to corresponding English grade.

PENMANSHIP.—Teach from written exercises.

SECOND HALF YEAR.

READING.—Selections from Kreis V.

TRANSLATION.—From Kreis V, second part to page 134 inclusive.

GRAMMAR.—Review preceding grades. Easy compound and complex sentences.

LANGUAGE.—Refer to corresponding English grade.

PENMANSHIP.—To be taught daily in connection with all written exercises.

SEVENTH GRADE. SEVENTH YEAR.

FIRST HALF YEAR.

READING.—Selections from Kreis VI, pages 1–65.

TRANSLATION.—From second part of Kreis VI, pages 128–141, (omitting. lessons 13, 18, 19).

GRAMMAR.—Review. Complex sentences continued; compound sentences; punctuation.

LANGUAGE.—Refer to corresponding English grade.

PENMANSHIP.—Taught in connection with all written exercises.

SECOND HALF YEAR.

READING.—Selections from Kreis VI, pages 65–127.

TRANSLATION.—From second part of Kreis VI, pages 141–155, (omitting lessons 28–33.)

GRAMMAR.—Complex and compound sentences continued. Order of words in sentence. Punctuation.

LANGUAGE.—Refer to corresponding English grade.

PENMANSHIP.—Taught in connection with all written exercises.

EIGHTH GRADE. EIGHTH YEAR.

FIRST HALF YEAR.

TRANSLATION.—From second part of Kreis VII, lessons 1, 2, 3, 5, 8, 11, 12, 14, 15, 17, 18, 23.

GRAMMAR.—Analysis—substantive, adjective and adverbial clauses. Review.

RECITATION.—Appropriate selections from Kreis VII. (Lyric and Epic poetry, pages 125–154). N. B.—A short sketch of the author's life should be given by the teacher.

LANGUAGE.—Refer to corresponding English grade.

PENMANSHIP.—Taught in connection with all written exercises.

SECOND HALF YEAR.

TRANSLATION.—Kreis VII, from lessons 25, 29, 31, 37, 39, 66, 69, 72, 78, 81, 82, 84, 87.

GRAMMAR.—General review. Rendering of the English participle, modal auxiliaries and their English equivalents, passive voice, etc.; *e. g.*—"No stopping here!" "It is to be hoped he will pass his examination." "They spoke of his owing them a large sum of money." "I was followed." "He is to be induced to sign the note." "What are you going to do with it?" etc. (C. f. pp. 231–233 of reader).

READING.—Selections from Kreis VII.

RECITATION.—(German drama, etc.) Models on pp. 148–154, Kreis VII.

LANGUAGE.—Refer to corresponding English grade.

PENMANSHIP.—Taught in connection with all written exercises.

N. B.—Spelling is to be taught in each of the grades in connection with all written exercises.

LIST OF BOOKS

—— USED IN THE ——

PUBLIC SCHOOLS.

FOR BALTIMORE CITY COLLEGE.

Allen (F. D.)—Euripides' Medea.
Allen (W. F.)—Introduction to Latin composition.
Allen & Greenough—Ovid.
Alexander—Moral science.
Alden—Science of government.
Boise—Homer's Iliad, (first six books).
Bolmar (A.)—French verbs.
Brandt—German grammar.
Barker—College chemistry.
Brooks—Higher arithmetic.
Bowser—Analytical geometry.
Chase (R. H.)—Maclean's Horace.
Chase & Stuart—Virgil's Æneid; Horace; Cæsar's Commentaries; Sallust, (with lexicon); Cicero's orations, (with lexicon); and Livy.
Collier (W. F.)—History of the British Empire.
Crittenden—Blanks for new elementary book-keeping.
DeFivas—Elementary French reader.
Dulany—Dulany-Martin's elementary human body, and Bill of Rights and Constitution of Maryland.
Dana—Text book of geology, (revised).
Eliot & Storer—Qualitative chemical analysis.
Ely—Political economy.
Fleming & Tibbins—French dictionary, (abridged).
Flagg—Demosthenes' Hellenic Orations.
Goethe—*Egmont*.
Goodwin (W. W.)—Greek grammar and Greek reader.
Gildersleeve—Latin grammar; Latin reader; New Latin primer, and Latin exercise book.

Gage—Elements of physics.
Herodotus—Book VII (Butler).
Haven (J.)—Mental philosophy.
Hepburn—Manual of rhetoric.
Harrington (C. S.)—Plautus.
Heath—New German-English and English-German; and French-English and English-French, dictionaries.
Joynes-Otto—Introductory German lessons.
Jones—Greek prose composition.
Johnston—United States History.
Joynes—Schiller's *Der Geisterseher*.
Kendrick—Xenophon's Anabasis, with vocab.
Keetel—French series.
Kendrick (J. B.)—Greek at sight.
Liddell & Scott—Greek-English lexicon, (abridged).
Lessing—*Minna von Barnhelm*, (students' classic German plays).
Lounsbury—English Language.
Lockyer—Astronomy.
Loomis (E.)—Calculus.
Lippincott—Gazetteer of the world, with supplement. (Sheep).
Myers & Allen—Ancient History, part I. and part II.
Noel & Chapsal—French literature.
Norton—Natural philosophy.
Newell & Creery—Revised sixth reader.
Ollendorff—New French method. (Value).
Olney—General geometry and calculus.
Packard—New manual of book-keeping and correspondence.
Prang—System of Drawing.
Quackenbos—School U. S. History; First lessons in composition, and Composition and rhetoric.
Ray—New higher algebra.
Remsen—Organic chemistry, and Briefer course in chemistry (Am. Sci. Series).
Raddatz—Schiller's *Neffe als Onkel*.
Shepherd (H. E.)—History of the English language.
Smith—History of Greece (student's series).
Shaw (T. B.)—New history of English Literature.
Spencerian—Copy books.
Sargent—Standard Speaker.
Tyler (W. S.)—Tacitus' histories.
Tomlinson—Latin for sight reading.
Upham—Mental philosophy (abridged).
Van Daell—Heine's *Die Harzreise*.

Voltaire—History of Charles XII., (18 mo.)
White (J. W.)—First lessons in Greek.
Wilson (W.)—The State.
White (J. T.)—Latin-English and English-Latin lexicon.
Whitney (W.D.)—Brief German grammar; William Tell, and Essentials of English grammar.
Westlake—How to write letters.
Wentworth (G. A.)—Plane and solid geometry (revised); Plane and spherical trigonometry and surveying with tables, and Surveying and navigation with tables.
Webster—Dictionaries: International and High School.
Zacho—New American speaker.

FOR FEMALE HIGH SCHOOLS.

Adler—Progressive German reader.
Anderson (J. J.)—Manual of history; School history of England; School history of France, and Popular school history of U. S.
Bain—Composition and rhetoric.
Boyd—Annotated poets—Milton; Thomson.
Brooks (E.)—Geometry and trigonometry.
Caswell & Ryan—Book II., (Barcarolle).
Crittenden—Blanks for new elementary book-keeping.
Dulany—Martin's elementary human body.
Fasquelle—Colloquial French reader; Larger French course; Introductory French course.
Harvey—Practical English grammar.
Harvest Chorus Collection.
Joynes-Otto—Introductory German lessons.
Keetel—French series.
Lockyer—Astronomy.
Lippincott—Gazetteer of the world, with supplement, (sheep).
Murdoch—Analytic elocution.
Mason—Fourth music reader—(Nat. music course).
Norton (S. A.)—Elements of physics, and Natural philosophy.
Newell & Creery—Revised fifth and sixth readers.
Pinney—Progressive French reader.
Packard—New manual of book-keeping and correspondence.
Prang—System of drawing.
Quackenbos—Composition and rhetoric; Higher arithmetic and Practical arithmetic.
Ray—New elementary algebra.
Spiers & Surenne—French dictionary (12 mo.).

Shaw (T. B.)—Outlines of English literature, and New History of English literature.
Upham—Mental philosophy (abridged).
Whitney (W. D.)—Brief German grammar.
Webb—Model etymology (new edition).
Westlake—Common school literature.
Webster—Dictionaries: International, and High School.

FOR BALTIMORE POLYTECHNIC INSTITUTE.

Anderson—New manual of general history.
Peck—Ganot's popular physics (revised).
Other books as required.

FOR THE GRAMMAR GRADES.

Appleton—Standard elementary geography; Standard higher geography (Md. ed.), and Numbers applied.
Bibles, (12 mo. sheep), and Douay.
Bert—First steps in scientific knowledge, parts IV. and V.
*Brooks—New mental arithmetic.
Creery (W. R.)—Catechism of U. S. History, and Grammar School Speller.
Davies (C.)—Geometry and trigonometry.
Dulany—Bill of Rights and Constitution of Maryland; School history of Maryland; Primer physiology, (for fourth grade as supplementary reader); Standard physiology; Martin's elementary human body.
Eclectic—Book-keeping.
Eggleston—New History of United States, and First Book in American History.
Harvey—Revised English grammar, (for eighth grade); Revised elementary grammar; Language lessons.
Johnston—Outline maps: E. & W. H.; U. S., Mex. and Canada; Europe; N. & S. A.; Asia; Africa; Mercator's projection.
*Knox-Heath—Ely. lessons in English, teachers' edition.
Lippincott—Gazetteer of the world, with supplement, (sheep).
†Martenet—Map of Maryland.
Mason—Second and third music readers, and music chart—(Nat. music course).
Meservey—Single entry book-keeping, and blanks.
Newell & Creery—Revised third, fourth, fifth and sixth readers.

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*For teachers.
†One for each school.

New Graded—Fourth, fifth, and Cathcart's literary, readers—American Educational.
*Powell—How to talk.
P. D. & S.—System of penmanship.
Prang—System of drawing.
Peabody—Fourth, fifth and sixth readers.
Quackenbos—First lessons in composition.
Ray—New elementary algebra.
Swinton—Language lessons; Language primer; Third, fourth and fifth readers.
*Southworth & Goddard—Elements of composition and grammar.
*Smart—Free Gymnastics (for teachers of girls).
Sunshine—Song book.
Testaments—(32 mo. cloth), and Douay.
"The Gem" song book.
Wright—Nature readers, III., IV.
Webster—Dictionaries: International and Common school.

FOR THE PRIMARY GRADES.

Appleton—Standard elementary geography, First lessons in arithmetic, and Reading charts.
Butler—Reading charts.
Bibles—(12 mo. sheep), and Douay.
*Brooks—New mental arithmetic.
Creery (W. R.)—Primary school speller.
Eggleston—First book in American history.
Fisher—A B C chart, Cards and Table cards.
Johnston—Outline maps: E. & W. H.; U. S., Mex. and Canada.
*Knox-Heath—Ely. lessons in English, teachers' edition.
Mason—First music reader, and Music chart.—(Nat. music course).
Monroe (L. B.)—Reading charts.
McGuffey—Reading charts.
Newell & Creery—Revised first, second and third readers.
New Graded—Readers I., II., III.—American Educational.
New American music reader (for third grade).
P. D. & S.—System of penmanship.
Prang—System of drawing.
Peabody—Primer, infant, first, second and third readers.
Swinton—Primer, first, second and third readers.

* For teachers.

‡Smart—Free gymnastics.
Sunshine—Song book.
Testaments, (32 mo. cloth), and Douay.
"The Gem" song book.
Wright—Nature readers, I., II., III.
§Wentworth & Reed—First steps in numbers, teachers' edition.
Webster—Dictionaries—National pictorial and primary.

FOR THE ENGLISH-GERMAN SCHOOLS.

Goebel (L.)—Primer, II. and III. text books.
Klemm—German text books (Kreis)—IV., V., VI., VII.
Payson—German copy books.

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‡For teachers.
§For teachers of the first grade.

List of Stationery, Etc.,

FOR ALL THE SCHOOLS.

Composition (or plain copy) books, 40 pages.
Medairy's spelling blanks.
Slates, round corners, wire-bound, 6x9, 7x11, 8x12.
Ink wells, with or without covers.
Lead pencils—Eagle, Faber, and Dixon H. S.
" Excelsior Compass (for eighth grade).
Erasive rubbers—Eagle No. 1076.
Blackboard rubbers—Coughlin No. 4 and National No. 2.
Whiting Mills paper (cap, 12 lbs.; letter, 10 lbs.; note, 6 lbs).
Manilla paper (for drawing, 40 lbs., and for models, 100 lbs).
Envelopes—Buff and white, small and large sizes.
Slate pencils—German, 5½ in.; soapstone, 6 in., and Eagle (in wood).
Steel pens—Gillott's genuine, Nos. 404 and 303; Esterbrook's school, No. 333; Eagle, No. 170; Spencerian, Nos. 1 and 5.
Pen-holders—Eagle, Nos. 1637, 1539 and 1709; Faber, Nos. 2440 and 2560.
Chalk crayons—Parmenter's; N. Y. Crayon Co.'s, and Colored.
Mucilage—Carter's.
Ink—Maynard & Noyes'; American Standard Ink Co.'s fluid; Carter's black letter and fluid; Duval's black and violet.
Rulers.
Gongs—B. & H.—Principals' No. 2400; assistants', No. 2100.
Teachers' inkstands, with rack.
Roll books.
Knives for sharpening pencils—Eagle No. 2300.
Ink vents.
Recess bells.
Colored papers—assorted colors.
Le Page's liquid glue.

EXTRACTS FROM STATUTES AND ORDINANCES

RELATING TO THE

Public Schools of Baltimore City.

(BALTIMORE CITY CODE, 1892.)

STATUTES.

776. The Mayor and City Council of Baltimore shall have full power and authority to establish in said city a system of free public schools, which shall include a school or schools for manual or industrial training, under such ordinances, rules and regulations as they may deem fit and proper to enact and prescribe; they may delegate supervisory powers and control to a Board of Public School Commissioners, may prescribe rules for building school houses, and locating, establishing and closing schools, and may in general do every act that may be necessary or proper in the premises.

777. The Board of Commissioners of Public Schools of Baltimore city shall have power to examine, appoint and remove teachers, prescribe the qualifications, fix the salaries, subject to the approval of the Mayor and City Council, and select text-books for the schools of said city; provided such text-books shall contain nothing of a sectarian or partisan character. They shall annually make a report to the State Board of Education of the condition of the schools under their charge, to include a statement of expenditures, number of children taught, and such other statistical information as may be necessary to exhibit the operation of the schools. * * *

778. The Mayor and City Council of Baltimore shall have power and authority to make all ordinances for the protection of the school houses and property, and to punish any person who may disturb the sessions of said public schools.

779. They are authorized and empowered to levy and collect upon the assessable property in said city, as other taxes are levied and collected, such amount of taxes as may be necessary to defray all the expenses incurred for educational purposes by them.

780. The Treasurer, on the warrant of the Comptroller, shall pay to the Mayor and City Council the proportion of the free school fund to which said city is entitled.

781. The Orphans' Court of said city shall order and direct the fund arising from intestates' estates that may be administered upon in said court, and which remain undistributed for want of legal representatives of the intestates to claim the same, to be paid to the Board of Commissioners of Public Schools.

782. The court shall not make such order until they shall be satisfied that the intestate left no legal representative living at the time of his or her death, and they shall cause the administrator of such estate to give notice, by advertisement to be inserted for such periods of time and in newspapers published in such places as they may deem necessary, that upon default of the appearance of any legal representative of the intestate by a certain day, to be fixed by the court, and named in said advertisement, the estate of said intestate will be paid to the Commissioners of Public Schools.

783. They shall, upon passing an order directing such payment, require from the treasurer of the Board of Commissioners of Public Schools, or any other officer who may be appointed by the said Board of Commissioners, or the Mayor and City Council of said city, to receive such funds, a receipt and release to the administrator for the same.

784. The release shall contain an obligation that the said funds shall be applied by the Board of Commissioners of Public Schools to the use and support of the public schools of the city of Baltimore, and shall be recorded and preserved in said court as other records are.

785. If the estate of an intestate shall be paid to the Board of Commissioners of Public Schools under this law, and any legal representatives of the intestate of no remoter degrees among collaterals than brothers' or sisters' children, shall at any time appear and prove him, her or themselves to be such legal representatives, the Board of Commissioners of Public Schools who receive such estate, or their successors, if the same shall be in their hands or shall have been applied to the use of the public schools, shall restore the same to such legal representatives out of the school fund under their direction.

Public General Laws of Maryland.

(ARTICLE XLIII.)

31. No teacher in any school shall receive into such school any person as a scholar, until such person shall produce the certificate of some regular practicing physician, that such an applicant for admission into the school has been duly vaccinated. Any teacher so offending shall on conviction thereof, forfeit and pay a fine of ten dollars for each offence, and no public school trustee or commissioner shall grant a permit to any child to enter any public school without such certificate, under the same penalty.

(ARTICLE LXXVII.)

40. The nature of alcoholic drinks and narcotics, with special instruction as to their effects upon the human system, in connection with the several divisions of the subject of physiology and hygiene, shall be included in the branches of study taught in the common schools, and shall be taught to and studied by all pupils whose capacity will admit of it in all departments of the public schools of the State, and in all educational institutions supported wholly or in part by money from the State. * * * * The said text-books must be published, printed and sold in the State of Maryland.

ORDINANCES.

1. There shall be appointed by the two Branches of the City Council, in convention assembled, at the times and in the manner prescribed in Sections 2 and 3 hereof, twenty-two persons, to be called Commissioners of Public Schools, one commissioner to be selected from each of the several wards of the city; and said commissioners shall continue in office for the terms as prescribed in Sections 2 and 3 hereof; provided, that if any commissioner shall remove from the ward from which he was appointed before the expiration of his term of office, then his place in the board shall be declared vacant, and the board may declare vacant the place of any commissioner who shall absent himself from three successive stated meetings of the board, without showing satisfactory cause for his non-attendance, after having been duly notified of the same; the Mayor shall always be *ex-officio* a member of said board.

2. The Commissioners of Public Schools who shall be appointed in the month of February, 1877, shall be appointed for one, two, three and four years, which several terms of service shall be determined by lot at the first

meeting and immediately after their organization by the election of a President and Secretary, as provided by Section 5 hereof; the members severally appointed for the First, Second, Third and Fourth Wards shall draw lots for their terms of service, which terms shall be one, two, three and four years respectively, as fixed by the lot then drawn; and the several members for each succeeding four wards, the wards being taken in numerical order, shall determine their terms of service in the same manner as aforesaid.

3. In the month of February, in each succeeding year, the First and Second Branches of the City Council, in convention assembled, shall elect school commissioners in place of those only whose term of office shall at that time expire, and the commissioners elected, as prescribed by this section, shall continue in office for four years.

4. The First and Second Branches of the City Council, in convention assembled, shall have power to expel a member of the Board of Commissioners of Public Schools, either for persistent neglect of duty or for conduct unbecoming a School Commissioner. Should any vacancy occur in the board by removal, resignation, death or otherwise, the unexpired term shall be filled in the same manner as provided by the preceding sections hereof.

5. Said commissioners shall meet within ten days after their election, and at their first meeting they shall proceed to the election of president from their own board, to be chosen by a majority of the whole body; also a person to act as secretary, who shall serve for one year, unless sooner removed by the board, and who shall have charge of the rooms, books, papers and documents of the board, and shall perform such clerical duties as may be required of him by its members or committees. The board shall assign the duties to be performed by him, and his salary shall be two thousand dollars per annum, payable monthly. If a vacancy should occur in the office of secretary from any cause whatever, it shall be the duty of the board to elect a person to fill said vacancy as soon as it can conveniently be done. In all cases a majority of the commissioners shall constitute a quorum for the transaction of business.

6. Whenever a vacancy or vacancies shall occur in the Board of Commissioners of Public Schools during the session of the City Council, it shall be the duty of the president of the board to inform the Mayor of such vacancy or vacancies, who shall communicate the same to the First and Second Branches of the City Council, who shall proceed in convention, according to their respective rules, to fill said vacancy or vacancies. If a

vacancy or vacancies shall occur during the recess of the City Council, by death, resignation or otherwise, it shall be the duty of the board to fill the same as soon as may be convenient, the person or persons so elected to serve until the next session of the City Council.

7. There shall be appointed by the board a suitable person to be the Superintendent of Public Instruction for the City of Baltimore, who shall be a resident of the City of Baltimore, of literary and scientific acquirements and of skill and experience in the art of teaching, and who shall serve for the term of four years, unless sooner removed by the board. It shall be the duty of the Superintendent to devote his time and attention entirely to the general supervision of the public schools of the city, subject to such rules and regulations as the Board of School Commissioners may establish. It shall especially be the duty of the Superintendent to visit every school under the charge of the Board of Commissioners of Public Schools as often as once in each quarterly session, or four times during the academic year, to examine into its respective studies and to inquire into all matters relating to the government of the schools, such as its curriculum of studies, discipline and course of instruction pursued therein, the text-books that are used, the condition of the school-houses, and to make a monthly report of the matters thus specified to the Board of Commissioners of Public Schools.

8. There shall be appointed by the said board a suitable person to be the Assistant Superintendent of Public Schools, who shall be a resident of the city of Baltimore, of skill and experience in the art of teaching, and whose term of office shall be concurrent with that of the Superintendent.

9. It shall be the duty of such Assistant Superintendent of the Public Schools to aid the Superintendent in the supervision of the public schools of the city; he shall visit the primary schools as often as his duties will permit, and make a report of such visits to the Superintendent; he shall assist in the examination of the quarterly reports of teachers, in the preparation of the questions for the semi-annual examination of the classes of the primary and Grammar schools, and be subject to such rules and regulations as the Board of Commissioners of Public Schools may establish.

10. In order to advance the interests of the schools committed to his charge, the Superintendent, in conjunction with a committee of three members of the School Board, shall, in the forms prescribed by the board, examine into and ascertain the qualifications of applicants for the situation of teachers, and re-examine, if necessary, any of the teachers employed in the schools under the charge of the board; and in order further to promote the

cause of sound education, and to elevate the character and qualifications of the teachers, the Superintendent shall, by all the means in his power, counsel and advise with the teachers in relation to their duties and proper classification of studies, the best methods of imparting instruction, and, in general, as to the proper discipline and management of the schools under their charge.

11. The salary of the superintendent shall be fixed by the Board of Commissioners of Public Schools, subject to the approval of the two Branches of the City Council; and he shall make annually a report in writing to the Mayor and City Council, of all matters of interest or importance in connection with the schools; and shall also, when requested, furnish to the Board of Commissioners of Public Schools of the city a written statement, showing the number of schools in the city, the number of pupils under instruction and the teachers employed therein, with such additional information in respect to the matters above specified as may be deemed advisable and necessary.

12. The salary of the assistant superintendent of public instruction in Baltimore city shall be two thousand dollars ($2,000) per annum.

13. The Board of School Commissioners are authorized and directed to appoint annually, at the same time that the Secretary of the said board is elected, a suitable person, a citizen of Baltimore, who shall be known as the Superintendent of supplies.

14. It shall be his duty, under the instructions from the Board of School Commissioners, to supervise, take care of and have general control of all furniture, stoves, furnaces, fuel, repairs, and other incidental supplies, which are now in possession of the board, or which may be purchased by order of the board, be responsible to the board for their condition, and report from time to time as the board may direct, and perform such other duties with reference thereto as may be required by the board.

15. His salary shall be eighteen hundred dollars per annum, the amount to be taken out of the appropriation made to the said Board of School Commissioners for salaries.

16. The Register is authorized to receive, through the secretary of the board, all moneys from the teachers, and all other funds due the school board, and pay out of the funds standing in the treasury of the city to the credit of the public schools any orders that are provided for in the levy for school purposes, after having been examined by the committee on accounts

and passed by the board, signed by the president and countersigned by the secretary of the Board of Commissioners of Public Schools.

17. The said Board of Commissioners of Public Schools shall have charge of the public schools in operation in the city of Baltimore, and of all such as may be in operation during their continuance in office; and it shall be their duty to employ teachers and determine their salaries, subject to the approval of the Mayor and City Council; to prescribe the courses of study and the books to be used; to make all such by-laws for their own government and all such rules and regulations for the management of the schools as they may deem expedient, and to modify and repeal the same at their pleasure; provided that such by-laws, rules and regulations so made or modified be not inconsistent with the laws of the State or the ordinances of the city. And it shall further be the duty of said board, at such time as other city officers are required to report, to report to the Mayor and City Council a statement of their transactions, with an account of their receipts and expenditures during the year last passed, and their resources for the year then commenced. The schedule of salaries of all officers, employees and teachers shall stand as now fixed. (The Code contains the schedule).

18. The Commissioners of Public Schools shall have charge of all the buildings used for school purposes, and they are hereby authorized to make all necessary repairs in the school houses of the city, provided the same shall not exceed the sum of three hundred dollars.

19. The said Board is authorized and directed to rent out, except for political purposes, for such compensation as to them may seem just and reasonable, the main halls in the Eastern and Western Female High School buildings, for public purposes, at such times and under such regulations as to them may appear right and proper; provided, the same shall not be rented so as to interfere with or interrupt the regular exercises of the schools.

20. The revenue derived therefrom, as provided in the preceding section, shall be accounted for by the said Board and paid over by them to the Register, who is directed to place the same to the credit of the public school fund.

21. The said Board shall not employ in building, repairing or improving, or in furnishing stationery or any other kind of supplies, any member of said Board; nor shall any member of said Board be interested, directly or indirectly, in any contract whatever for the use of the public schools.

22. The Board of Commissioners of Public Schools shall advertise for

proposals in the purchase of all supplies for said schools to the amount of *fifty dollars and over, and said proposals shall be opened in the presence of the City Comptroller, the City Register and a committee of said Board, who together shall constitute a board to award all contracts except those for musical instruments, which shall be awarded as follows: The said Board of Commissioners of Public Schools, or its committee on music, shall select not less than three responsible and reputable manufacturers of the class of instruments required, and shall designate by proper specifications the character and style of the instrument to be furnished, and shall receive bids from those selected, which shall be opened before the above board of award, and the said board of award shall award the contract, in its discretion, to the lowest, or next to the lowest bidder, for such a period as it may think proper, not to exceed five years.

23. In awarding all other contracts the committee of the Board of Commissioners of Public Schools shall have one vote, the Comptroller one vote, and the Register one vote; but in awarding contracts for musical instruments each member of the committee on music shall have one vote, the Comptroller one vote, and the Register one vote.

24. The salaries of the Superintendent, Assistant Superintendent and Secretary of the Board, and of the teachers and all other persons permanently employed by the Commissioners of Public Schools, shall be paid monthly, on the last day of each month, by the City Register; and he is hereby authorized, in case of any deficiency in the collection of the school fund, or in anticipation of the levy for the same, to advance, from time to time, to said fund, such sums as shall be required for the payment of said salaries at the time when they shall be due.

25. There shall be no charge for tuition or for the use of books and stationery in any of the public schools, but it shall be the duty of the Commissioners to furnish, free of all cost, to the pupils and their parents, all the necessary tuition and the use of books and stationery for the several schools, and in general whatever fuel or other supplies the schools may require—the same to be paid for from the public school fund.

26. The public schools of Baltimore are designed exclusively for the education of those pupils whose parents, or in the case of orphans whose guardians are citizens of Baltimore, or residents of Baltimore with a *bona fide* intention to become citizens.

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* By ordinance approved April 18, 1894, this amount was made "not in excess of two hundred dollars."

27. The Board of Commissioners of Public Schools are hereby directed, before admitting the children of non-resident parents or guardians into the public schools of the city of Baltimore, to charge such parents or guardians the following amounts, viz.: For admission to the Baltimore City College, per capita, twelve dollars and fifty cents per quarter; for admission to the Female High Schools, per capita, eight dollars per quarter; for admission to grammar schools, per capita, four dollars per quarter; for admission to primary schools, per capita, three dollars per quarter; the said amount to be paid invariably in advance, and to be paid by the School Commissioners to the Register of the city for account of the school fund; provided, however, that nothing herein contained shall be so construed as to prevent the free admission into said schools of the children of registered voters of the city who are employed by the city in or about Druid Hill Park or the water works there situate, and who reside beyond the city limits.

28. The Commissioners of Public Schools shall not admit any book or books into use in the public schools, or discontinue the use of the same after having been admitted, unless said admission or discontinuance be approved by a vote of a majority of the entire board in session assembled at a regular meeting of said board.

29. The said Commissioners of Public Schools are hereby authorized to receive all devises, bequests and donations which may be made for the benefit of said public schools, and all devises, bequests and donations received by said commissioners, by virtue either of this section or of any act or acts of the General Assembly of Maryland, shall be paid over by them to the Register of the city, who shall place the same to the credit of the school fund; and if any condition or conditions be prescribed in any such devise, bequest or donation, the same shall be applied under the direction of said commissioners, with the sanction of the Mayor and City Council, agreeably to the intention of the testator or donor; and if no condition be prescribed in any such devise, bequest or donation it shall not be lawful for said commissioners to draw all or any part of the amount thereof out of the city treasury during the year in which it was received, unless the collections from the resources and levy of the school fund for said year should fall short of the estimated expenditures forming the basis of said levy, or unless it shall have been already allowed in the estimated resources of the fund for said year; otherwise the same shall be included in the estimates of the ensuing year.

30. All funds which shall be paid to or received by the City Register, or in any other way, or through any other person or persons, passed over and

transferred to the Mayor and City Council of Baltimore, pursuant to the provisions of Section 781 and 784 of Article 4 of the Code of Public Local Laws, title City of Baltimore, sub-title Intestates' Estates, shall be held subject to the order of the Board of Commissioners of Public Schools of the city of Baltimore, in like manner as the funds derived from taxation for said purposes are held, and such funds as may be thus received are declared to be a separate and distinct revenue, to be applied to the use and support of the public schools, in addition to the annual tax levied and the annual appropriation made for that purpose.

31. It shall be the duty of the City Register to notify and inform the Board of Commissioners of Public Schools, by a communication in writing, whenever any funds arising from the aforesaid source shall be hereafter received by him, and the amount of the same.

32. Whenever said Commissioners of Public Schools shall intend to apply any portion, or all of the aforesaid funds, hereafter received from intestate estates, the warrant or order drawn for said funds, or any portion thereof shall show upon its face that it is drawn upon said funds; and it shall be the duty of the City Comptroller and the City Register to keep a separate account of all receipts and disbursements for said special and specific fund.

33. The Mayor is authorized, upon the presentation to him of satisfactory evidence of the existence of any just and valid claim on the part of the corporation, on account of the school fund, against a certain estate, and which claim it is, in his judgment, judicious to prosecute, to employ for that purpose the services of one or more agents, and to agree with such agent or agents for such compensation to him or them as he may deem fair and reasonable, provided the said compensation shall be entirely contingent upon the recovery of the money.

34. All assessments for paving or repaving in front of any of the public schools or lots of ground attached thereto, and also all assessments of benefits for opening or widening any street or streets, so far as the public schools may be interested, shall be paid by the Register out of any unappropriated money in the treasury.

35. It shall not be lawful for said Board of Commissioners of Public Schools to exceed in their expenditures the amount annually appropriated therefor by the City Council; and it shall be their duty to apply the same exclusively to the several purposes, and as far as practicable, in the propor-

tion specified in the statement of estimated expenses, on which said City Council shall have based the school fund levy for the year.

36. Whenever any of the pupils of Baltimore City College shall have satisfactorily completed the prescribed term and course of instruction, the Commissioners of Public Schools shall have the power to confer on them testimonials in form as follows, viz.: This certificate is given to ——— ———, a pupil of the Baltimore City College, in testimony that he has pursued and satisfactorily completed the studies of the ——— course of ——— years; and said testimonials shall be signed by the President of the Board, by the Mayor of the city, with the seal of the city attached, by the committee on the Baltimore City College, and by the principal, vice-principal and professors of said college.

37. Said Commissioners of Public Schools are authorized to cause said testimonials to be engraved on copper, or lithographed, with a suitable vignette, the expenses necessarily connected with the preparation of said testimonials to be paid from the school fund; provided that no commissioner or teacher shall ever charge or receive any fee or compensation for so signing said testimonials.

38. Said Commissioners of Public Schools shall have power to confer testimonials on pupils of the Eastern and Western Female High Schools, in conformity with the requisitions and provisions of the preceding two sections.

39. Whenever any pupil shall leave any of the high schools without having completed the prescribed term and course of instruction, then, and in such cases, said commissioners shall have power to confer such testimonials on said pupils as said commissioners may deem to be proper and appropriate to the occasion.

40. It is hereby made the duty of the Board of Commissioners of Public Schools of the city of Baltimore to organize separate schools for colored children, (this was done in 1867), and to establish as many schools for the education of colored children of Baltimore city as may, in the judgment of said board be necessary.

41. The schools to be established in accordance with the provisions of this ordinance shall be subject to such rules and regulations as may be prescribed by the said board in its discretion.

43. The Board of School Commissioners are authorized and directed in all colored schools to be hereafter established, and in all colored schools in any territory hereafter annexed to Baltimore city, to appoint teachers of the colored race as instructors in such public schools set apart for colored youths; provided that they be shown, by examination or such other test as is applied to white teachers, to possess the necessary moral and intellectual qualifications therefor.

44. It shall be the duty of the Superintendent of Public Schools to hold public examinations to which all colored applicants for teachers' positions may and shall be admitted.

45. All such applicants who pass a satisfactory examination shall be certified by the Superintendent of Public Schools to the Board of School Commissioners, and said Board of School Commissioners shall appoint the persons so certified to positions as teachers in all colored schools hereafter established and set apart for the colored race, and also in all such schools in any territory hereafter annexed to Baltimore city.

46. The schools hereafter established for colored children shall be supplied with the colored applicants so certified to the extent of the number applying, before teachers of any other race shall be employed in such schools; provided, however, that in no case shall teachers of the white race be employed in any school in which colored teachers are employed.

47. The salaries paid to such colored teachers shall be equal to those now paid to white teachers for similar service in the colored schools.

48. Whenever any of the pupils of the colored schools have satisfactorily completed the term and course of instruction prescribed for the pupils of the Colored High School, the Commissioners of Public Schools shall have power to confer upon them testimonials in conformity with requisitions and provisions of this article relating to the conferring of testimonials upon pupils of the Baltimore City College and the Eastern and Western Female High Schools.

49. There shall be established at the Baltimore City College, and at each of the two Female High Schools, a library for their use, without charge, under such regulations as may be adopted by the Board of Commissioners of Public Schools.

50. The selection of the books, which shall be only of an instructive and moral character, shall be made by the said commissioners, or a com-

mittee appointed by them for the purpose, and no book deemed by them to be injurious to the morals of the pupils, or of a sectarian character, whether obtained by purchase or donation, shall be admitted in said libraries; and all books purchased under any future ordinance or resolution of the City Council or otherwise, for this purpose, shall be subject to the restrictions herein contained.

51. The Commissioners of Public Schools of the City of Baltimore are hereby authorized to accept and receive the premiums given by the Trustees of the Peabody Institute to the Baltimore City College and the Female High Schools, as specified in Mr. Peabody's letter to his trustees, and to have the same distributed from time to time in such a manner as they shall deem most conducive to the benefit of the schools and the objects of the donor.

52. The Board of Commissioners of Public Schools of Baltimore city are authorized and directed to establish in the city of Baltimore, in some convenient locality, as near the centre of the city as possible, a school for manual training, under such name or title as said board shall select; said school shall be open to the children of the citizens and *bona fide* residents of the city of Baltimore, and the admission to said school shall be regulated by the law now existing for the admission of pupils to the public schools of the city of Baltimore, except in so far as changed by this ordinance; the age and qualifications for admission to said school shall be fixed and prescribed by the said school board; provided, that the fee for the use of tools and materials for pupils who are the children of residents or citizens of Baltimore shall not exceed one dollar each per scholastic quarter; pupils from other places may be admitted to said school upon such terms and conditions and upon payment of such fees as said board shall prescribe.

52 *a* to 52*e*. An ordinance nearly identical with the above (Section 5 providing for a Manual Training School for Colored Children, was approved February 16th, 1892.

57 to 60. It shall be the duty of all physicians who may be in attendance in any family whose child or children may be attending any of the public schools of this city, which family may have a case or cases of scarlet fever, diphtheria, measles, small-pox, chicken-pox, whooping cough, or any other contagious disease, to give a certificate of the same to the parents or parent of the child or children so diseased as soon as the disease is developed; and it shall be the duty of the parents or parent, as soon as the physician certifies that contagious disease exists in his, her or their house, to notify the

principal of the school attended by his, her or their children within twenty-four hours. That if there be no physician attending in cases of disease mentioned in this ordinance, it shall be the duty of the parents or parent to report the disease to the principal of the school attended by his, her or their child or children within twenty-four hours from the time the disease is known to be contagious. That if any parent or physician shall notify any public school teacher of the city that any contagious disease exists in any family whose child or children are attending any of the public schools of this city, then it shall be the duty of the principal of the school to exclude the child or children of said family from the school until the attending physician certifies that all danger from contagion has passed. That if any teacher or teachers reside, board or lodge in any house where a child or children in such house is suffering with any contagious disease, of which fact the said teacher has been cognizant, then it shall be the duty of said teacher to certify to the same to a member of the school board, and such teacher shall not perform his or her duties in any public school in this city until a physician attending such case or cases of contagious disease shall certify that all danger from contagion has passed. Failure to comply with the provisions of this ordinance will subject the offender to a fine of ten dollars.

61. When scarlet fever, diphtheria, measles, small-pox, chicken-pox, whooping cough, or any other contagious disease has existed in any family whose child or children have been attending any of the public schools of this city, which child or children had not been attended by any practicing physician, then it shall be the duty of any vaccine physician who may be applied to for a certificate that all danger from contagion has passed, to visit the premises, if in his district, where said child or children had been sick, and if there should exist no danger from contagion he should give the certificate applied for free of charge.

(See also the Statute relating to vaccination).

By resolution approved May 22, 1893, the board was directed to have all the schools opened for the reception of pupils thirty minutes before the commencement of the regular exercises.

By resolution approved March 13, 1894, it is provided "That the American flag be raised on all public school buildings where the school buildings are provided with said flags, at half-mast on Memorial Day."

INDEX.

Pages 1–43 are duplicated. In the first part of the book Roman characters are employed in numbering 1–43. In the second part numerals are used.

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THE

BALTIMORE CITY COLLEGE

REGISTER.

1893-94.

COMMITTEE

— OF THE —

Board of Commissioners of Public Schools.

JOHN T. FOLEY, ESQ., *Chairman.*

JAMES BOSLEY, M.D.,

JAMES W. DENNY, ESQ.,

MERVILLE H. CARTER, M.D.,

PRESIDENT JOHN T. MORRIS, *Ex-officio,*

SUPERINTENDENT HENRY A. WISE, *Ex-officio.*

COLLEGE CALENDAR.

'93-'94.

FIRST TERM.

1893.

Sept. 11, Monday.....Opening of Session.
" 12, Tuesday. ...Old Defenders' Day.
" 14, Wednesday. Special Examination for Admission.
Nov. 21, Tuesday. ...Second Quarter begins.
" 23, Thursday. ..Thanksgiving Day.
Dec. 23, Saturday....Christmas Vacation begins.

1894.

Jan. 2, Tuesday. ...Resumption of Exercises.
Feb. 10, Saturday....First Term ends.

SECOND TERM.

Feb. 12, Monday.....Third Quarter begins.
" 22, Thursday. ..Washington's Birthday.
Mar. 22, Thursday. ..Easter Vacation begins.
" 27, Tuesday. ...Resumption of Exercises.
April 13, Friday.....Arbor Day.
" 26, Thursday. ..Fourth Quarter begins.
May 30, Wednesday. Decoration Day.
June 18, Monday.....Commencement Day.

'94-'95.

FIRST TERM.

1894.

Sept. 3, Monday.....Opening of Session.
" 5, Wednesday. Special Examination for Admission.

HISTORICAL NOTES.

1839. By a resolution of the Mayor and City Council of the 7th of March, 1839, the Commissioners of Public Schools were requested to establish a High School, "in which the higher branches of English and classical literature only should be taught." This resolution was promptly carried into effect. The school was organized about the 20th of October of that year (Nathan C. Brooks, A.M., Principal), and was at first known simply as The High School.

In 1848, the Eastern and Western High Schools having in the meantime been established, this school was denominated the Central High School of Baltimore.

In 1851 (Francis Waters, D.D., Principal), "it was determined to reorganize the school upon a new plan upon its opening in September. This reorganization consists principally in dividing the course of study into distinct departments, and adopting a new order of exercises, and new regulations with reference to discipline. Each instructor is allotted to a particular department, and all the students in the school receive instruction from him in the studies of that department."—(School Report, 1851, p. 17.) The first Public Day for conferring the honors of the school was observed November 27, 1851.

In the autumn of 1857 (Thomas D. Baird, Principal), under authority of an ordinance of the Mayor and City Council, the Board of Commissioners of Public Schools arranged with the Trustees of the Peabody Institute for the annual distribution of the prizes under the Peabody Foundation, and the prizes were accordingly first awarded July 22, 1858.

By an ordinance of the Mayor and City Council, approved October 5, 1866, the name of the school was changed to The Baltimore City College.

In 1877, the course of study was extended from four to five years.

PROFESSORS AND INSTRUCTORS SINCE THE ORIGIN OF THE SCHOOL.

Nathan C. Brooks, A.M., LL.D., Principal, 1839. Resigned, 1849.

James Crapster, Assistant Teacher, 1840. Resigned, 1842.

William Gibson, A.M., M.D., Assistant Teacher, 1842. Resigned, 1849.

James McIntire, M.D., Assistant Teacher, 1842. Professor of Mathematics and Astronomy, 1851. Professor of Astronomy, 1870. Retired, 1875.

William Minifie, Teacher of Drawing, 1845. Resigned, 1850.

Rev. E. J. Stearns, Assistant Teacher, 1846. Resigned, 1847.

A. Freitag, J. U. D., Teacher of Modern Languages, 1846. Resigned, 1848. Professor of German and Spanish, and Assistant in the Classical Languages, 1849. Resigned, 1855.

Edward Duffy, Assistant Teacher, 1847. Resigned, 1851.

J. L. LaReintrie, Professor of French and Spanish, 1848. Died, 1859.

E. Frey, Teacher of German, 1848, one year.

David Bixler, Assistant Teacher, 1848. Transferred to M. G. School No. 1, 1851.

Francis Waters, D.D., Principal, 1849, and Professor of the Classical Languages, and of Mental and Moral Science, 1851. Resigned, 1853.

M. A. Newell, A.M., Assistant Teacher, 1850. Professor of Natural Sciences, 1851. Resigned, 1853.

Rev. Robert Piggot, Teacher of Drawing and Writing, 1850. Retired, 1852.

James Harshaw, Assistant Teacher, 1851. Transferred to M. G. No. 12, 1854.

D. A. Hollingshead, A.M., Assistant Teacher, 1851. Transferred to Western High School, 1854.

William Elliott, Jr., A.M., Assistant Teacher, 1851. Adjunct Professor of Mathematics, 1855. Professor of Mathematics, 1857. Principal, and Professor of Higher Mathematics, 1873. Died, 1890.

Joseph Strong, Teacher of Graphics, 1852. Resigned, 1853.

John A. Getty, A.M., Principal, and Professor of the Classical Languages, and of Mental and Moral Science, 1853. Died, 1854.

Montgomery Johns, A.M., M.D., Professor of Natural Sciences, 1853. Resigned, 1854.

David McIntire, Teacher of Writing and Book-keeping, 1853. Resigned, 1854.

H. Newell, Teacher of Drawing, 1853. Resigned, 1854.

John F. Monmonier, M.D., Professor of Physiology, 1853. Professorship abolished and Physiology transferred to the Professorship of Natural Sciences, 1855.

Reginald N. Wright, A.M., M.D., Professor of Natural Sciences, 1854. Resigned, 1862.

James R. Webster, Teacher of Writing and Book-keeping, 1854. Died, 1882.

George Morrison, A.M., Principal, and Professor of the Classical Languages, and of Mental and Moral Science, 1854. Resigned, 1857.

William R. Creery, A.M., Professor of Belles Lettres, 1854. Resigned, 1859.

David A. Woodward, Professor of Drawing, 1854. Resigned, 1857.

John B. Wentz, A.M., Assistant Teacher of German and Latin, 1854. Professor of German, and Adjunct Professor of Latin and Greek, 1857. Resigned, 1862.

Peter Unger, Ph.D., Professor of German, 1855. Retired, 1858.

Matthew H. Wright, Tutor of Mathematics (definite appointment for one year), 1857.

Thomas D. Baird, Ph.D., LL.D., Principal, and Professor of the Ancient Languages, and of Mental and Moral Philosophy, 1857. Died, 1873.

J. Asbury Morgan, A.M., Vice-Principal, and Professor of the Latin and Greek Languages, 1858. Resigned, 1860. Re-appointed, 1862. Died, 1879.

Perley R. Lovejoy, A.M., Professor of Belles Lettres, 1859. Professor of History and Rhetoric, 1866. Retired, 1868.

Charles H. Dupuy, Professor of the French and Spanish Languages, 1859. Resigned, 1862.

Rev. William M. Heilig, A.M., Adjunct Professor of the German Language and of History, 1860. Retired, 1866.

George A. Witte, A.M., Professor of the German and French Languages, 1862. Retired, 1866. Re-appointed Professor of the German Language, 1868. Professor of German and French, 1869. Retired, 1870.

Henry C. Wentz, Professor of Natural Sciences, 1862. Retired, 1866.

J. J. G. Webster, Professor of Belles Lettres *ad interim*, (one year), 1863.

J. Willis Westlake, A.M., Professor of the English Language and Literature, 1866. Professorship consolidated with that of Rhetoric and History, 1869.

Edmund G. Waters, M. D., Professor of Natural Sciences, 1866. Resigned, 1868.

Samuel E. W. Becker, Ph.D., Professor of the French and Latin Languages, 1866. Resigned, 1868.

L. R. Peet, Professor of the German Language, 1866. Resigned, 1868.

Henry E. Shepherd, Professor of History and Rhetoric, 1868. Professor of History and English Literature, 1869. Resigned, 1875, to become Superintendent of Public Instruction, Baltimore.

David T. Millard, M.D., Professor of Natural Sciences, 1868. Resigned, 1873.

Charles H. Moore, M.D., Professor of the French and Latin Languages, 1868. Retired, 1869. Re-ap-apointed Professor of German and French, 1870. Died, 1871.

Andrew S. Kerr, Professor of Mathematics, 1870. Professor of Mathematics and Astronomy, 1875. Resigned, 1880, to become Principal of the Western Female High School, Baltimore.

A. L. Milles, B.A., Professor of the French Language, 1871. Professor of French, and Adjunct Professor of Latin, 1876.

Charles F. Raddatz, Professor of German and History, 1871. Vice-Principal, and Professor of German and History, 1890.

Chapman Maupin, M.A., Professor of Latin, 1873. Professor of Latin and Greek, 1879. Resigned, 1882.

Powhatan Clarke, M.D., Professor of Natural Sciences, 1873.

Alexander Hamilton, Tutor, 1874. Adjunct Professor of English and Mathematics, 1876. Professor of English and Mathematics, 1891.

Charles C. Wight, Professor of History and English Literature, 1875.

Richard W. Preece, Professor of Drawing, 1875. Resigned, 1894.

Stephen F. Norris, Tutor, 1876. Adjunct Professor of Mathematics and Latin, 1884. Professor of Mathematics and Astronomy, 1890.

Heningham Gordon, B.A., Tutor, 1876. Resigned, 1881.

Nathan H. Thayer, A.M., Adjunct Professor of Natural Sciences, 1877. Retired, 1878.

Francis A. Soper, A.M., Professor of Mathematics and Astronomy, 1880. Principal, and Professor of Higher Mathematics, 1890.

Alfred Z. Hartman, A.M., Tutor, 1880. Adjunct Professor of Latin, 1882. Professor of Latin and Greek, 1882.

G. Emory Morgan, Tutor, 1881. Adjunct Professor of Latin and Physiology, 1885. Adjunct Professor of Latin and English Literature, 1886. Professor of Latin and English Literature, 1894.

Joseph H. Elliott, Tutor, 1882. Professor of Book-keeping and Penmanship, 1883. Secretary of the Faculty, and Professor of Book-keeping and Penmanship, 1890.

Adoniram J. Robinson, A.B., Tutor, 1882. Retired, 1887.

J. Newman Hank, A.M., Adjunct Professor of Latin and Greek, 1882. Professor of Latin and Mental Philosophy, 1887.

Philip H. Friese, Tutor, 1883. Adjunct Professor of Natural Sciences and English, 1888.

Julius G. Miller, Adjunct Professor of Mathematics and Latin, 1890.

Robert Clinton Cole, A.M., Professor of History and Political Economy, 1890.

Henry Skinner West, A.B., Professor of Drawing, 1894.

FACULTY.

1893-'94.

FRANCIS A. SOPER, A.M., PRINCIPAL,
Professor of Higher Mathematics.

CHARLES F. RADDATZ, VICE-PRINCIPAL,
Professor of German and History.

A. L. MILLES, B.A.,
Professor of French, and Adjunct Professor of Latin.

POWHATAN CLARKE, M.D.,
Professor of Natural Sciences.

CHARLES C. WIGHT,
Professor of English Literature and History.

ALFRED Z. HARTMAN, A.M.,
Professor of Latin and Greek.

J. NEWMAN HANK, A.M.,
Professor of Latin and Mental Philosophy.

JOSEPH H. ELLIOTT, SECRETARY OF THE FACULTY.
Professor of Book-keeping and Penmanship.

STEPHEN F. NORRIS,
Professor of Astronomy and Mathematics.

ROBERT C. COLE, A.M.,
Professor of History and Political Economy.

ALEXANDER HAMILTON,
Professor of English and Mathematics.

GERARD E. MORGAN, A.M.,
Professor of Latin and English Literature.

HENRY SKINNER WEST, A.B.,
Professor of Drawing.

PHILIP H. FRIESE,
Adjunct Professor of Natural Sciences and English.

JULIUS G. MILLER,
Adjunct Professor of Mathematics and Latin.

GRADUATES.

1893.

THOMAS SEWELL ADAMS,
HORACE ARMSTRONG,
CORNELIUS BEATTY,
ANTHONY BONN,
CHARLES EDWARD CASPARI,
CHARLES BERTRAM FEIG,
LOUIS FRANK,
ALBERT DALE GANTZ,
WILLIAM KURRELMEYER,
HENRY LANAHAN,
FRANCIS MARION MILLER,
CHARLES EVERS MYERS,
HARVEY WARD NORTH,
CLARENCE RENSHAW,
HENRY MERRYMAN RYNEHART,
MORGAN SANDERS,
JOHN LOWRY SANFORD,
EDWARD SICKEL,
JOHN WESLEY RICHARDSON SUMWALT,
WILLIAM EDWARD THOMSEN,
CHARLES BURNET TORSCH,
JAMES McCONKY TRIPPE,
WILLIAM GURDON TYLER,
WILLIAM OLIVER VAN HORN,
WILLIAM FISHER WALLIS,
FREDERICK HOWARD WARFIELD,
JOHN ARMISTEAD WELBOURN,
ISAAC STEWART GEORGE WOLF,

RECIPIENTS OF PEABODY PRIZES

OF THE FIRST GRADE ($100 EACH):

HARVEY WARD NORTH,
HENRY LANAHAN,
CHARLES BERTRAM FEIG.

OF THE SECOND GRADE ($50 EACH):

JOHN WESLEY RICHARDSON SUMWALT,
CLARENCE RENSHAW,
WILLIAM KURRELMEYER,
JAMES McCONKY TRIPPE.

RECIPIENT OF SHAKESPEAREAN PRIZE:

JAMES McCONKY TRIPPE.

CATALOGUE OF STUDENTS.

FIFTH YEAR CLASS.

Blake, Frank R.
Blake, William S.
Cooley, Albert C.
Davidson, Spencer L.
Donaldson, William A.
Gourley, George F.
Hobbs, Jesse V.
Hughes, Oden
Klinefelter, Van V., Jr.
Maloy, William M.
Maydwell, Charles W.
Rasch, Harrie B.
Reed, Charles E.
Schoenrich, Otto
Schultz, Alexander A.
Todd, John H.
Weglein, David E.
Witz, Franklin E.

FOURTH YEAR CLASS.

Beeuwkes, Reinier K.
Blake, Eugene, Jr.
Blatter, Frank K.
Bonney, John L. V.
Buehner, Otto, Jr.
Cordell, Eugene F.
Dohme, Gustavus C.
Dolfield, Frederick A.
Emmerich, Joseph S.
Erdman, Henry M.
Girdwood, Allan C.
Gordon, Edward
Hamilton, Matthew A., Jr.
Haughton, Hugh L.
Hoerr, Frederick C. C.
Hopkins, Harry A.
Keech, James K.
Leeke, Howard N.
Lohmeyer, Herman,
Lucke, Henry J.
Maccoun, George T.
Miller, John N.
Miller, Raymond D.
Ogier, James W.
Price, Howard C.
Reed, Clyde
Reese, James T.
Robb, Arthur L.
Rupert, Walter P.
Scholl, George B.
Seth, Alexander L.
Sherbert, Joseph R.
Shuter, Henry P.
Stidman, Albert G.
Stubbs, Robert B.
Swaine, James W.
Uhler, Howard I.
Underhill, Albert J.
Wellslager, Walter H.
Wenchel, John F.
Whitehurst, Milton M.
Wicks, John N.

THIRD YEAR CLASS.

Aaron, Alfred W.
Armstrong, Louis W.
Barnes, George H.
Behn, Charles H.
Bennett, James H.
Benson, Clifton D.
Bibbins, James R.
Bowen, William A.
Boyce, Frederick G.
Carroll, Charles C.
Catling, Ernest S.
Clark, Garnett Y.
Clark, Perley W.
Clunet, Frank J.
Davidson, John Z.
Dieffenbach, Albert C.
Dieterich, Louis F.
Downes, Henry C.
Edmunds, Charles K.
Fallon, Harry L.
Fishach, David E.
Fiske, Frank S.
Flaherty, Martin V.
Francis, Isaac H.
Graham, Joseph F.
Gibson, Stevenson A.
Hakesley, Edward L.
Haulenbeek, Elmer
Hayward, James F.
Hobbs, Gustavus W.
Hoopes, Walter W.
Hullett, John G.
Jackson, Robert W.
Joyner, Leon L.
Kadden, Arthur R.
Kemp, Guy P.
Kennard, William H.
King, Clarence
Korff, John A.
Krager, Walter M.
Kurrelmeyer, Herman W.
LaBarrer, John P.
Lansburg, Sidney
Legg, James C.
Lewis, Charles H.
Luthardt, Frank F.
Martien, James C.
Matthews, Harry J.
Matthews, Noel H.
Neal, Joseph F.
Neal, John J.
Peters, James G.
Ralston, David A.
Read, Edgar T.
Reeside, Armor
Reiley, Henry B.
Robertson, James C.
Rogers, Wilbur W.
Rossberg, William
Rossmarck, Ferdinand C.
Scharf, John T., Jr.
Schmidt, Charles
Searles, Edward J.
Shertzer, Tyrrel B.
Sherwood, Watson E.
Simpson, Francis M.
Snyder, Calvin DeF.
Snyder, Harry F. R.
Spear, Irving
Spencer, Charles J.
Stromenger, Walter N.
Supplee, James F.
Taliaferro, Charles M.
Thomas, Richard H.
Tigner, William T. C.
Waite, John H.
White, Albert A.
Wilcox, Louis
Williams, Jesse W.
Winterode, Robert P.
Ziegler, Robert C.
Zies, William C.

SECOND YEAR CLASS.

Abell, Charles S.
Altreith, Elmer
Arnold, Alfred R.
Atkinson, Walter E.
Bacharach, Ollie
Banthem, Alvin M.
Barton, William J.
Bateman, Lowry J.
Biays, Tolley A.
Biggs, Richard J., Jr.
Boggs, Fenton
Boggs, Henry A. I.
Bramble, John H.
Brewer, James R., Jr.
Brown, William L.
Buckner, Charles T.
Byrne, Wm. L.
Campbell, John G.
Carter, Earl
Cassard, Percy E.
Cecil, George H.
Chambers, Lyttleton M.
Claypoole, James Y., Jr.
Clayton, Clarence H.
Clift, Josiah B.
Clift, William C.
Cockey, Edward R.
Cockey, John R.
Cone, Frederick W.
Conway, Frank G.
Cook, Henry W.
Copenhaver, John C.
Deems, Clarence
Dietrich, Edgar P.
Donovan, William
Dougherty, Edward C.
Douty, James F.
Edwards, Francis A.
Edwards, Philip H.
Falck, John B.
Fink, Frederick
Frank, Simon W.
Frizzell, Mars H.
Fullwood, Howard
Gaddess, Charles C.
Gaither, Benjamin H.
Gawthrop, Richard H.
Geiger, Harry W.
Gibson, Arthur C.
Gibson, Joseph W.
Gill, Martin M.
Gilmore, John C.
Goldsmith, Gordon
Gosnell, Lou W.
Gourley, Henry W.
Graham, Allan S.
Greenbaum, Lawrence
Grimes, Robert H.
Hall, James B.
Hamilton, Pinkney J.
Harrison, William G. W.
Hauer, William DeF.
Hayward, Eugene H.
Heineman, Milton
Hilken, Paul G.
Hockaday, Robert
Hofmeister, Andrew L.
Holmes, Newman C.
Holt, Hugh J.
Houston, Albert
Houston, William H.
Hudson, John J.
Hyde, Edward P.
Jones, Edwin E.
Jones, Talbot D.
Jory, Herbert G.
Jory, Howard O.
Katz, Ray
Kennard, James A.
King, Andrew J.
Kirkness, Edward F.
Kirkwood, Carl B.
Kirkwood, Irwin R.
Kitzmeyer, Charles G.

Second Year Class—*Continued.*

Krebs, George E.
Kriel, Walter M.
Langlotz, Elisha H.
Lazenby, Maurice
Lee, Stephen S., Jr.
Leech, Wilbur V.
Letcher, Henry W.
Maccubbin, George H.
Madden, Thomas J.
Mallalieu, Wilbur V.
Manken, Henry
Miller, Howard E.
Miller, Lewis D.
Mills, William O.
Mitchell, Clifford C.
Mitchell, Joseph E.
Mitchell, James F.
Morgan, Philip S.
Mullen, James M.
Norton, William J.
O'Ferrall, Alfred J.
Parker, Walter W.
Penniman, Arthur W.
Price, Walter H.
Quigley, Stephen H.
Ray, Guy
Reese, Matthias F.
Reiley, James McK.
Rettaliata, Anthony L.
Rice, Thomas S.
Richardson, John N.
Robinson, Steuart H.
Roulston, Robert B.
Rouse, Frederick A.
Scheu, Thomas
Selden, Charles, Jr.
Shannahan, Carroll T.
Sherbert, Charles R.
Singley, Frederick J.
Skutch, Robert F.
Smith, Reuben G.
Solter, Harry C.
Staub, John T.
Stein, Edwin A.
Stelle, James M.
Swindell, George M.
Swope, John L.
Tagg, Stanley D.
Todd, William B.
Trippe, Andrew N.
Trippe, Barclay H.
Ulman, Jesse
Ulman, Joseph N.
Vogel, Charles F.
Wagner, Frederick A.
Wagner, Louis
Walter, Gordon L.
Waltham, Alan P. S.
Walz, Charles A.
Ward, William W.
Watkins, Joseph E.
Webster, Alfred M.
Weedon, William S.
Weinberg, Hiram N.
Welbourn, Edward H.
West, William C.
Whiteside, Edgar I.
Wiegand, John C.
Wiley, Maurice M.
Williams, Alexander E.
Williams, Oscar F.
Williams, Richard C.
Wilson, Alexander C.
Wright, Arthur

FIRST YEAR CLASS.

Adams, Charles E.
Adams, Harry F.
Anderson, David L.
Anderson, Roger B. T.
Armiger, Jesse F.
Armiger, Richard D.
Baker, Charles L.
Baker, William W. W.
Baldwin, Henry W.
Bamberger, William B.
Barber, Thomas C.
Bechtel, Richard G.

First Year Class—*Continued.*

Becker, Jesse J.
Bensen, John H.
Billmire, John N.
Blake, Charles H.
Blake, James M.
Blome, Jerome F.
Bolgiano, Charles J.
Bowen, Josias S.
Boyce, Albert P.
Boyer, Norman T.
Broessel, John G.
Brooke. Paul
Broom, John H.
Brown, Walter
Brown, William K.
Browne, Bennet B.
Brundige, Thomas W.
Bucher, Frederick V.
Bucher, Howard J.
Bull, Charles
Bull, Edwin C.
Bullock, William A.
Buttner, William J.
Byrne, Henry S.
Cahn, Harry
Cameron, Jenkins S.
Carter, Archibald J. C.
Christ, Henry
Classen, Frederick J.
Clayton, Joseph B., Jr.
Clendenin, Edwin C.
Cockey, Charles E.
Cockey, Irving C.
Codd, Clarence J.
Cordray, Charles McK.
Cornelius, Thomas R.
Crummer, Edward P.
Cuddy, Frank E.
Curley, William E.
Damm, August F.
Darling, John C.
Davidson, George D.
Day, Clarence C.
Deal, Charles B. S.
Deal, Louis
Deiches, Willie H.
Deming, John B.
Depkin, Charles F. W., Jr.
Dew, John H.
Dieterich, Waldemar F.
Dougherty, Harry J.
Downey, Samuel K. P., Jr.
Drane, Frank C., Jr.
Dudley, Frank S.
Dudley, Walter H.
Duer, Howard S.
Duffy, Ralph
Duvall, Alfred L., Jr.
Duvall, Walter P.
Eccleston, Washington G.
Eckel, Clifton
Elderdice, Irvin H.
Elphring, William H.
Eversman, Lewis V.
Ewell, John E.
Fairbank, Charles A., Jr.
Fairfax, William R.
Fastie, Howard T.
Fentress, Walter E.
Fishach, Leyburn G.
Follmer, Frederick W.
Ford, Horace R.
Foster, Leslie D.
Fountain, John M.
Friedenwald, Edgar B.
Frost, Philip P.
Gathwright, Edward W.
Germon, Albert F.
Gettier, John C.
Gimpel, Edward H. W.
Gladmon, Arthur H.
Goodman, Louis E.
Goodwin, Percy H.
Gorfine, Joseph Q.
Gorfine, William J.
Grady, Richard, Jr.
Green, Sweetser L.
Greenbaum, Irvin

First Year Class—*Continued.*

Griffiths, William L.
Hamilton, William H.
Hammar, John T. W.
Hann, Charles K.
Hanna, Charles W.
Harris, John T.
Hatter, Frank P.
Hawkins, Charles H.
Hebden, Roland
Heim, Walter G.
Herman, Irvin G.
Herzog, William H.
Hewes, Harry P.
Hölljes, Henry D.
Hook, Charles A., Jr.
Hoover, John W.
Hough, Walter R.
Hunter, Thomas M.
Hurst, Jesse B.
Jennings, Andrew F.
Katz, Sigmund
Katzenstein, Walter
Keech, John R.
Kennedy, George H.
Kerr, William A.
Kines, Louis
King, Thomas H.
Kirk, Robert E., Jr.
Kirkland, William
Kirkness, John J., Jr.
Knipp, Frank H.
Knorr, Frederick McM.
Lambert, John W.
Lange, Ralph W.
Langeluttig, Harry
Laupheimer, Alvin C.
Levering, Edwin W., Jr.
Levinson, Moses A.
Lilly, Percy E.
Lockhart, Allen B.
Louis, George J.
Lowenstein, Adolph
Lusby, John D.
Macdonald, George H.
MacWilliams, Wallace
Manger, William H.
Martin, John S.
Martindale, Henry H.
Mathews, Wilbur L.
Matthias, William C.
McClosky, Louis M.
McConky, Edward D.
McFaul, John H.
McFaul, William N.
McFrederick, Clarence E.
McGee, Joseph L.
McGill, Oscar A.
McGinity, Joseph F.
McGlone, Bernard C.
McSherry, Horace A.
Mendels, Solomon
Menger, Lewis H.
Messer, Charles F.
Metzel, George V.
Miller, Elmer H.
Miller, John F.
Mitchell, George T.
Moog, Charles F.
Morfit, Mason, Jr.
Morris, Charles T.
Muller, Charles W.
Mylander, Walter C.
Naylor, Harry A.
Nice, Clay A.
Nice, Harry W.
Nock, George O.
Noel, Frank D.
Norris, William B.
Ogle, Charles J.
Ohlgart, Robert E. L.
Oliver, George W.
Parker, Leonard M. C.
Peddicord, Everett M.
Phillips, Harry D.
Plack, Henry
Purcell, Steuart

First Year Class—*Continued.*

Reed, Herbert P.
Reeder, Amos A.
Reeside, John E.
Requardt, Theodore J.
Reynolds, Robert H.
Roberts, Roy E.
Roe, Harry F.
Rosenthal, Lewis J.
Rouckel, Henry H.
Savin, Andrew A.
Savin, Thomas L.
Saylor, Charles H.
Scherer, John W.
Scherer, Theodore J.
Schiff, Sidney
Schwartz, Frederick L.
Schwartz, Maurice
Seabold, George W.
Selby, George E.
Seltzer, Joseph W.
Shaw, Howard C.
Sheridan, William W.
Shipley, Harry C.
Sibiski, Alexander A.
Siegel, John F.
Singley, Henry A.
Skillman, Wilbur F.
Slaughter, William E.
Smith, Harry M.
Smith, Joseph S.
Snyder, William L.
Sondermann, John
Sprigg, Walter P.
Startzman, Howard H.
Stein, Calvert F.
Stein, Leon
Stewart, Howard E.
Stewart, Thomas B.
Straus, Henry P.
Strauss, Abraham
Street, Harry H.
Strickler, Herschel J., Jr.
Struth, Otto A.
Sucro, William
Sudler, Wright
Sutherland, Charles S.
Swindell, William E.
Tabb, Christopher W.
Templeman, Frank L.
Thompson, William C.
Thomson, William E.
Tohey, William M.
Tolson, John C.
Tumbleson, Charles C.
Unglaub, John W. S.
Uttermohle, George A.
Valentin, Henry A.
Vavrina, Charles
Waldkoenig, Christian, Jr.
Wallis, Robert W.
Warfield, William W.
Watts, Martin S.
Weatherby, Raymond L.
Weber, Charles H.
Weil, Mayer S.
Weil, Norman
Weil, Sydney S.
Welty, Harry T.
Wentz, Maurice A.
Whitehill, Charles
Whitehill, Sydney
Whitehurst, Jesse H.
Wilkens, Frederick J.
Willard, Edwin G.
Williams, Thomas B.
Wilson, Charles E.
Worley, Nathan M.
Wright, Henry C., Jr.
Wright, Joseph L.
Wyvel, Charles F.
Younger, Daniel K.
Zies, Frederick
Zwanzger, George A. L.

THE COURSE OF STUDY.

FIRST YEAR.

English Composition—Quackenbos' First Lessons. Practical exercises. Two hours per week.

English Literature (Shaw)—Beginning with the time of Chaucer, a general survey of the subject is had, preparatory to more detailed work on particular periods in the upper years. Only the more prominent authors are taken up, especially those of the eighteenth and nineteenth centuries; also there is some study of the better known American authors. The students are particularly urged to read the standard writers for themselves, and to give some account of their reading to the class. Two hours per week.

Latin—Gildersleeve's Primer. Thorough drill in the declensions of nouns, pronouns and adjectives; also in the conjugations of regular verbs. In addition, some practice is afforded in the uses of the subjunctive mood, together with exercises under the more elementary rules of syntax. Five hours per week.

Algebra—Ray's Higher. Completed in one scholastic year. The work embraces the more difficult quadratic equations with special artifices and solutions, the progressions, the binominal theorem, indeterminate coefficients, series, continued frac-

tions, the computing and uses of logarithms, the general theory of equations and Horner's method. Two hours per week.

Geometry (*Plane*).—Three books of Wentworth. Copious exercises in constructions and loci; also theorems and problems involving the principles taught in the text. Completed in one scholastic year. Two hours per week.

Physics—Gage's Elements of Physics. First three chapters. Physical properties of matter, dynamics and heat. Additional experiments and problems are provided. Special emphasis is laid on quantitative work. Two hours per week.

United States History—Johnston's text. One hour per week. Beginning with the constitutional period, the class completes the book. Class is also required to memorize the Constitution of the United States.

English History—Collier's British Empire completed. Two hours per week.

Book-keeping — Five sets — day-book, journal and ledger. Seven sets—day-book, journal, cash-book and ledger. Writing of commercial forms, viz.: notes, drafts, bills, invoices, receipts, orders, due bills, checks, etc. Lectures on opening and closing books of account, trial balances, balance sheets, etc. Two hours per week.

Penmanship—Once a week.

DRAWING—Geometrical designs from blackboard and by dictation. Conventionalized flower and leaf forms in designs. Special practice from blackboard, and models for ability to execute bilateral symmetry. Free hand drawing in outline from geometric models singly and in groups. The principles of light and shade. Execution in free hand of pencil shaded drawings from geometric models and common objects such as vases. Two hours per week.

SECOND YEAR.

ENGLISH—Hepburn's Manual of Rhetoric. Reports on standard works in English literature. Lectures on journalism and on the English novel. Composition and declamation. Two hours per week.

ENGLISH COMPOSITION—Making abstracts from the works of standard authors. Reproductions in the student's own language of incidents from well known works. Original compositions, chiefly of a narrative or descriptive character. Occasional exercises in dictation. One hour per week.

LATIN—The class completes and reviews the Latin Primer (Gildersleeve), and reads the Latin Reader (Gildersleeve), with a part of the fifth book of Cæsar. Four hours per week.

GERMAN—Exercises in grammar and composition, from Whitney's Brief Grammar. Translation of Schiller's "Neffe als Onkel." Three hours per week.

GEOMETRY (*Plane and Solid*)—To the end of the eighth book of Wentworth. Constant exercises

in theorems and problems involving the principles previously taught. This latter work is, in part, assigned for home preparation, and, in part, for execution at sight. Four hours per week.

Physics—Gage's Elements of Physics completed. Lectures by the instructor. Problems and experiments performed by the students. Two hours per week.

History—Myers & Allen's History of Rome completed. Constitution of Maryland. Two hours per week.

Book-keeping—Three sets—day-book, journal, cash-book and ledger. Five sets—day-book, journal, cash-book, sales-book, invoice-book, bill-book and ledger. Two sets—commission. Writing up the necessary forms for the above sets. Two sets—business practice. Business correspondence. Lectures on the science of accounts, business usages, etc. Three hours per week.

Drawing—Conventionalized designs, cast in relief by shading. Original designing required. Special study of light and shade. Carefully shaded free hand drawings from geometric models and common objects in groups. Elementary orthographic projection. Simple plans and elevation in mechanical and architectural construction. Two hours per week.

THIRD YEAR.

English—No text-book used. Students are referred to books in the College Library. Lectures on the origin and history of leading English and American magazines. Composition and declamation continued. Three hours per week.

GERMAN—Translation of Schiller's "Tell." Exercises in grammar and composition from Brandt's Grammar. Review. German conversation. Two hours per week.

FRENCH—Keetels' Analytical and Practical French Grammar. First thirty-four lessons. De Fivas' French Reader. Exercises. Complete course of French verbs. Three hours a week.

LATIN—The class reads four books of Cæsar and three of Cicero's Orations against Catiline, and also writes Latin exercises. Gildersleeve's Grammar and Exercise Book are used. Four hours per week.

GREEK (Optional)—White's First Lessons is the book used. There is constant drill on accent, translating from Greek to English and from English to Greek, and on forms of declension and conjugation. After a fair acquaintance with verbs in "ω," short lessons from the Anabasis are given, once a week at first, gradually increasing in frequency as the year advances. Goodwin's Greek Grammar is used in connection with the First Lessons. Four hours per week.

MATHEMATICS—(*a*) Wentworth's Plane and Spherical Trigonometry completed. Four hours per week. (*b*) Arithmetic, algebra and geometry are reviewed by those students who do not study Greek. Four hours per week.

CHEMISTRY—Remsen's Briefer Course. Chemistry of metals and non-metals. Laboratory work by all students. Three hours per week.

History—Eastern Nations and Greece—Myers & Allen's text. Essays on historical characters. Each student is required to write one essay each quarter. Essays of the first quarter are on ancient, those of the second on mediæval, those of the third on modern European, and those of the fourth on American characters. One hour per week.

Drawing—Drawing from casts, especially of flower forms, with particular study of light and shade effects. Plans, elevations and sections in mechanical and architectural construction. Elementary isometric projection. The elements of designing on the vine motive. One hour per week.

FOURTH YEAR.

English—The History of the English Language (Lounsbury) is begun. Lectures on versification and the poets. Composition and declamation continued. Three hours per week.

German—Translation of Schiller's "Geisterseher." Brandt's Grammar and the instructor's prose compositions. Review. German conversation. Two hours per week.

French—The work of the preceding year reviewed. Keetels' French Grammar finished. Exercises. Chapsal's Leçons de Littérature Française. Twice a week.

Latin—This class reads four Orations of Cicero, one thousand or fifteen hundred lines of Ovid and about two books of the Æneid. It has also an

exercise from English into Latin once a week. The text-book for this is Gildersleeve's Latin Exercises. Much more Latin is read by the method referred to in the account of the Greek classes. Four hours per week.

GREEK—About four books of Xenophon's Anabasis are read during the year, and generally one book of the Iliad. The First Lessons (White's) is used for exercise in translating from English to Greek. Goodwin's Greek Grammar is used. Much more of the Anabasis is read by having, each day, one of the students prepare a page from some book other than the first four, and translate it before the class. By calling on various members of the class to render small portions, an exercise in rapid translation is given. Four hours per week.

MATHEMATICS—(*a*). Bowser's Analytic Geometry. The straight line and the conic sections are treated. The plotting of curves, and problems in loci receive special attention. Three hours per week.

(*b*). Wentworth's Surveying and Navigation as a substitute for Greek. Four hours per week.

ASTRONOMY—Lockyer's Elements, to page 214. One hour per week.

CHEMISTRY—Remsen's Organic Chemistry. Chemistry of the carbon compounds. Laboratory work by all the students. Three hours per week.

CIVIL GOVERNMENT—Wilson's "The State." Lectures. Essays on historical subjects. One hour per week.

DRAWING—Ornamental designing on the vine motive. Isometric projection carefully studied. Mechanical and architectural drawing. Parallel and angular perspective. One hour per week.

FIFTH YEAR.

ENGLISH—History of the English Language concluded. Lectures on Shakspere, Bacon and Chaucer. Original speaking. Three hours per week.

GERMAN—Translation of Heine's "Harzreise" and Goethe's "Egmont." Instructor's prose compositions and Brandt's Grammar. German conversation. Two hours per week.

FRENCH—Voltaire's "Histoire de Charles XII." General review of the grammar. Exercises on the leading features of the French syntax. Composition. Twice a week. In addition, a course in French reading and conversation is open to students of the fourth and fifth years. Once a week.

LATIN—This class reads four books of the Æneid and generally two books of the Odes of Horace. It has also an exercise from English into Latin once a week. The text-book used for this purpose is Allen's Introduction to Latin Prose Composition. Occasionally a few of this class read Livy as extra work. Gildersleeve's Latin Grammar is used throughout. Four hours per week.

GREEK—This class reads generally three books of the Iliad, and one of the longer books of Herodotus. Some classes read the Medea instead. The quantity of Greek read is greatly increased by the method pursued in the second year of this course, the class using, however, Homer and Herodotus instead of Xenophon. A written exercise from English to Greek is prepared weekly. Jones' Greek Prose Composition is the text-book. Four hours per week.

MATHEMATICS—Olney's Calculus. In the first half of the year differential calculus is taught, and in the second half, integral calculus. Four hours per week.

CHEMISTRY—For the first half of the year. Review of chemistry, with mineralogy and geology. Laboratory work by all students. Three hours per week.

PHYSICS—For second half of the year. Review of physics and chemical physics, supplemented by laboratory work by students. Three hours per week.

ASTRONOMY—Lockyer's Elements completed. One hour per week.

MENTAL PHILOSOPHY—The class studies the Mental Philosophy of Dr. Haven, including the department of the *intellect* and a part of the *sensibilities*. Two hours per week.

POLITICAL ECONOMY—First half of the year: Ely's Political Economy, with lectures. Essays on social topics. Visits to penal and reformatory institutions, and reports thereon. Second half of the year: Lectures on constitutional law or topics of the nineteenth century. Two hours per week.

Mental philosophy and political economy are taken only by those that do not study Greek.

DRAWING—Parallel and angular perspective. Charcoal drawing from groups of models and common objects, and from casts of flower forms and of sections of the human body. Pen and ink sketching. The orders of architecture and ornament. Execution of drawings shaded with brush in India ink and sepia. One hour per week.

TERMS OF ADMISSION.

The annual examination for admission takes place in June. All boys in the eighth (highest) grade of the grammar schools who are at least fourteen years of age, of good moral character, and not otherwise promoted and also boys who are not pupils of the public schools, may be admitted after passing a satisfactory examination in the studies pursued in said eighth grade.

Notice of the annual examination is given in the daily papers of Baltimore, at least ten days in advance.

By consent of the committee, a *special* examination for admission is held at the College every year, beginning on the first Wednesday after the opening Monday (usually the first Monday) in September, to accommodate only those who, for *good and sufficient reasons*, do not present themselves in June.

For the information of persons not familiar with the work of the eighth public school grade, it is stated that the examinations above indicated embrace spelling, reading, writing, grammar, composition, arithmetic, algebra through quadratic equations, the first, second and fourth books of Davies' Elementary Geometry (or an equivalent), geography, history of the United States, physiology and elementary physics.

NON-RESIDENT STUDENTS.

Students whose parents or guardians are not *bona-fide* residents of Baltimore, must pay $50 per annum for tuition and use of books. This sum is payable quarterly, *invariably in advance*, at the office of the Secretary of the School Board.

Non-resident applicants for admission will not be entered on the roll of the College until the requisite examination is passed, and a permit for entrance, signed by the Chairman of the Committee on Non-resident Pupils and the said Secretary, is presented. Such permit must be accompanied with certificate of vaccination, and a coupon showing the payment of the fee for the current quarter.

RIGHTS AND PRIVILEGES OF GRADUATES.

I. Eligibility for Positions as Teachers.—The graduates of the College who attain a final average in scholarship of at least eighty out of a possible one hundred, are eligible for ten years after their graduation to any position in the primary or grammar schools of Baltimore. No graduate, however, will be appointed principal if he is under twenty-one years of age, or first assistant if under nineteen years.

II. Matriculation at Johns Hopkins University.—Graduates, on the recommendation of the College Faculty, are permitted to matriculate without examination at the Johns Hopkins University.

PRIZES.

I. Peabody Prizes.—Mr. George Peabody, in his letter to the "Trustees for the Establishment of an Institute in the city of Baltimore," expressed his desire that the said Trustees, "in order to encourage and reward merit," shall distribute five hundred dollars every year, in money prizes, of sums not less than $50 nor more than $100 for each prize, to those graduates of "the public male High Schools now existing or which may hereafter be established," who shall "be adjudged most worthy, from their fidelity to their studies, their attainments, their moral deportment, their personal habits of cleanliness and propriety of manners."

By arrangement between the Trustees of the Peabody Institute and the Board of Commissioners of Public Schools, the annuity donated by Mr. Peabody is divided into three prizes of one hundred dollars each and four of fifty dollars each. These sums are distributed yearly, in the order of merit, to the seven young men standing highest among those members of the graduating class who have complied with the following condition of competition, viz: The completion of the *full* course of study in *five* consecutive years.

II. The "New Shakspere Society Prize."—The prize offered by "The New Shakspere Society" of London, consisting of a number of valuable publications of the Society, is annually awarded to that graduate who shall present the best essay on some subject connected with the plays of Shakspere.

III. The Frederick Raine Prize.—Colonel Frederick Raine, whose death occurred early in 1893, left by will to the Mayor and City Council of Baltimore a bequest of $200, with the condition that this sum shall be invested, and the income from the investment be annually applied to the purchase of a gold medal to be awarded to that member of the graduating class in Baltimore City College whose record is highest in the work of the German department.

IV. Prizes open to members of the College societies. These prizes are described on pages 34 and 35.

THE PUBLIC SCHOOL LIBRARY.

Students of the College have access to the books in this library, under the supervision of the Librarian, Mr. Joshua Plaskitt. On its shelves are more than seven thousand volumes of reference and high class literature.

COLLEGE ORGANIZATIONS.

ALUMNI ASSOCIATION.

The graduates of the Baltimore City College, recognizing the advantages to be secured to themselves and the College by periodical reunions of the Alumni, organized themselves into a permanent association May 15, 1885.

"The aim of the association is to strengthen the bond of union of the graduates and former students, to perpetuate the affection they cherish for the institution, to foster the prosperity of the College by giving their support and sympathy to its faculty and officers."

The government and administration of the association are entrusted to an Executive Committee consisting of two (2) members from each class represented in the association.

The following alumni have held the office of president since its formation:

1885.....Thomas S. Baer..... Class of '58
1886.....Theodore K. Miller..... Class of '63
1887.....Dr. Edward H. Spieker..... Class of '77
1888.....Theodore F. Wilcox..... Class of '71
1889.....J. Frank Supplee..... Class of '67
1890.....William H. Shryock..... Class of '49
1891.....John J. Dobler..... Class of '68
1892.....Daniel Miller..... Class of '67
1893.....John C. Rose..... Class of '77

The present officers are:

President.....JOHN B. VAN METER, D.D. Class of '59
1*st Vice-President*. A. Y. DOLFIELD.....Class of '57
2*d Vice-President*..ALVIN ROBERTSON.....Class of '54
Secretary.....DR. WM. BENSON, JR. ...Class of '71
Treasurer.....JOSEPH M. WATKINS.....Class of '74
Chairman of Executive Committee. } JOHN J. DOBLER.....Class of '68

All graduates and former students are entitled to membership upon application to the Executive Committee.

The admirable spirit shown by this Association, and the many practical proofs of the affection and devotion of its members in things that concern the College, are matters of profound satisfaction to the Faculty and the School Board.

THE BANCROFT LITERARY ASSOCIATION.

"The object of this Association is the improvement of all connected therewith, in debate, in oratory and in general literature."

OFFICERS.

President.....J. VINTON HOBBS.
Vice-President.....ALBERT C. DIEFFENBACH.
Secretary.....WALTER H. WELLSLAGER.
Treasurer.....WILLIAM S. BLAKE.
Sergeant-at-Arms.....THOMAS B. WILLIAMS.
Corresponding Secretary.....JOSEPH F. MCGINITY.
Board of Curators..... { ALBERT C. DIEFFENBACH. DAVID E. WEGLEIN. OTTO SCHOENRICH.

THE CARROLLTON SOCIETY.

"This society has for its object the realization on the part of its members of those benefits to be derived from exercise in debate and elocution, the promotion of said members in general literary culture, and their familiarization with parliamentary usage."

OFFICERS.

President ..... HENRY B. REILEY.
Vice-President. ..... HENRY J. LUCKE.
Secretary..... HARRY L. FALLON.
Assistant Secretary..... ROBERT H. GRIMES.
Treasurer..... JAMES McK. REILEY.
Sergeant-at-Arms... ..... J. BOOKER CLIFT.

The Bancroft and the Carrollton Societies annually contest in public, for two gold medals, donated by Professor Charles C. Wight, one for excellence in declamation and the other for skill in debate.

These two societies have each a Reunion Association, composed of former and present members.

The Bancroft Reunion Association annually offers a gold medal for highest excellence in essay writing, competition being limited to student members of the Bancroft Literary Association.

THE AGASSIZ ASSOCIATION.

CHAPTER 233, BALTIMORE, MARYLAND, (A.)

"The aim of the Agassiz Association is to collect, preserve and study natural objects."

OFFICERS.

President.....John P. LaBarrer.
Vice-President.....Wilbur F. Skillman.
Secretary.....Alfred W. Aaron.
Field Secretary.....R. Harry Thomas.
Assistant Field Secretary.....J. Herbert Waite.
Curator.....Edward J. Searles.
Treasurer and Sergeant-at-Arms, Albert C. Cooley.

Professor Philip H. Friese annually presents to the Agassiz Association a student's microscope, to be awarded to that member who shall write the best essay on some scientific topic.

The two literary associations and the society of young naturalists are extremely valuable educational adjuncts to the regular work of the School; and all students are strongly advised to seek membership in one or more of these bodies.

THE ATHLETIC ASSOCIATION.

The Athletic Association has for its object the physical training of those students of the City College who place themselves within its folds.

It supports the College base-ball and foot-ball teams, and it holds field days and tennis tournaments in which the students test their athletic abilities.

OFFICERS.

President.....James W. Swaine.
Vice-President.....Milton M. Whitehurst.
Secretary.....Walter H. Wellslager.
Treasurer.....George B. Scholl.
Base-Ball Committee.....James K. Keech. Milton M. Whitehurst. Henry B. Reiley.
Foot-Ball Committee.....Albert C. Dieffenbach. Harry A. Hopkins. Henry B. Reiley.
Tennis Committee.....J. Herbert Waite. George B. Scholl. Allan C. Girdwood.

THE GLEE CLUB.

The object of this organization is to stimulate an interest in music at the College, and to afford beneficial recreation to its members.

OFFICERS.

Director ..... Charles W. Maydwell.
President. ..... Otto Schoenrich.
Vice-President ..... Oden Hughes.
Secretary. ..... David E. Weglein.
Treasurer. ..... J. Harold Todd.

ALUMNI.

In 1851 Public Day for conferring academic honors was first observed, and since that time it has been observed annually. Those students who have satisfactorily completed the full term of study receive CERTIFICATES to that effect, signed by the Faculty, the Committee, the President of the Board, and the Mayor of the city, with the seal of the city attached. The following are the names, year by year, of those who have thus graduated.

GRADUATES:

1851.

Bruning, H. H.
Cockey, Edward C.
Cushing, Robert H.
Husband, Jacob L.
Lawson, Stephen Allen
Oliver, Joseph W.
Sanderson, Thomas, N.
Sollers, William
Thompson, Joseph
Vansant, Joseph

1852.

Cooke, John J.
Cook, Joseph M.
Francis, Charles
Griffin, Henry Clay
Griffin, Robert B.
Miles, Charles
Morgan, Ludowick
Schoolfield, William
Sloan, William
Smith, William T.
Stewart, John M.

1853.

Burke, Edwin
Curtain, Robert
Ely, John B.
Frazer, David
Hooper, Robert
Hooper, Samuel
Kirk, William
Miller, Jerome
Miller, John M.
Morrison, James
Shaw, Samuel
Tilyard, John
Toner, George
Ward, John
Webb, Louis
Wright, Matthew H.

1854.

Bordley, Th. H.
Cooke, William H.
Franklin, John
Hanna, James Alexander
Hoffman, Lawrence B.
Hollingshead, Francis J.
Hughes, Samuel J.
Littig, J. Merryman
Mitchell, James T.
Robertson, Alvin
Slater, John T. B.
Welch, Benjamin T.
Wilcox, William L.

1855.

Brawner, Daniel W.
Cook, Henry C.
Crumbacker, Charles W.
Divier, William T.
Emick, Robert G.
Freeland, Egbert R.
Gault, Cyrus, Jr.
Higgins, Eugene
Hollingshead, William H.
Holtzman, Henry C.
McClure, William J.
McKinley, William J.
McMillan, William D.
Macneal, Charles L.
Marden, George W.
Sloan, Edward O.
Stine, Thomas S.

1856.

Baer, Robert N.
Cathcart, Charles Henry
Chance, Francis Eldridge
Cole, Cornelius Magers, Jr.
Hanna, William Eagin
Haslup, Rezin Clark
Hatter, Charles William
Kerr, Andrew Scott
Lucchesi, Frederick Achilles
Maclellan, Arthur Rutland
Maccubin, Samuel Jarrett
Remare, Richard Antonio
Ridgaway, Thomas Stanford
Robinson, Geo. Washington
Sanders, James William
Schroeder, John Henry
Smith, Nicholas Maccubin
Smith, Walter George
Stockton, John McCurdy
Wardenburg, Wm. Frederick

1857.

Arthur, John F.
Atkinson, Wm. George
Bishop, John E.
Brian, Marion Andrews
Cooper, James F.
Corkran, Richard L.
Dashiell, William H. H.
Dietsch, Lewis C.
Dolfield, Alexander Y.
Hooper, John W.
Knowles, Gustavus W.
Krebs, Jacob E.
Lambdin, Charles E.
Rennolds, William L.
Stine, Frederick F.
Stromenger, Charles H.

1858.

Baer, Thomas Sargent
Brawner, Robert Guiscard
Cathcart, Robert, Jr.
Cathcart, Robert Emory
Cooper, George Washington
Davenport, Thomas
Dell, John Everett
Dorry, John Campbell
Fuller, Lewis Ogden
Glocker, Theodore William
Hooper, Thomas Whitridge
Hughes, Robert
Lange, John Herman
McElroy, John Wesley
Macneal, James Benoni
Merryman, Jos. Purnell
Miller, Henry Clay
Mullikin, James Clayland
Nagle, John George
Russell, John C.
Weatherby, Jeremiah Smith
Woodworth, William Rufus
Weber, Paul Ferdinand

1859.

Bell, Adelbert Theodore
Blimline, Bernard
Burgess, George Roberts
Evans, George Washington
Fort, Leander Duncan
Grim, Thomas Christopher
Hepburn, James Peter
Holmes, Thomas
Jones, William
Kelly, Thomas
LeCompte, James Henry
McNelly, Hugh
Milburn, James Richardson
Nagle, William
Ogier, Andrew Monkur
Peirson, Thomas George
Purdy, Warran Grafton
Richardson, Charles Herbert
Stirrat, David
Van Meter, John Bunyan
Wagner, Henry
Watkins, Robert Emory
Watts, Henry Robert
Webster, Joseph John Gurney

1860.

Barr, James Lewis
Chilton, William F.
Christopher, Henry Clay
Clarke, Asbury Jones
Clotworthy, George Washington
Cook, William Wright Louis
Dalrymple, William S.
Gorsuch, Robert McI.
Graham, James T.
Johnson, Howard Edgar
Knoebel, Henry
Koehl, Edward W.
Law, Jacob G. Davies
Lusby, Alexander F.
Middledith, James
Prior, Philip
Robinson, Oliver P.
Schwartz, John A.
Spamer, C. A. E.
Suman, John G.
Tarr, Joseph B.
Uber, Carlton A.
Watson, James E.
Wolfe, Francis Eugene S.

1861.

Appleby, George F.
Ball, Thomas Sewell
Beadenkopf, Henry
Clark, John C.
Coburn, George
Cook, Gilbert C.
McGlone, John T.
McKee, Henry C.
McMaines, William
McNeal, Charles R.
Reeves, Charles H.
Sollers, Andrew Jackson
Starr, William E.
Stewart, Robert
Torsch, Charles H.
Willson, John Ward

1862.

Appell, John F.
Butler, Henry Clay
Caldwell, William M.
Dietsch, Ferdinand Frederick
Dowell, George E.
Helfrich, Samuel Dutton
Hinks, William H.
Keller, William Lansfield
King, Albert T.
Leitch, Benjamin Franklin
Milburn, Charles W.
Pearson, Summerfield
Rich, George A.
Rogers, William C.
Shutze, John Augustus
Sills, John W.
Storke, Alexander Lamb
Taggart, Hugh T.
Towson, Henry Clay
Wallis, Robert V.
Westerman, Samuel Eggleston
Whittington, James D.

1863.

Applegarth, Thomas M.
Becker, John George
Brady, Hugh A.
Diggs, John Ross
Greenfield, Thomas S.
Gruber, William H.
Holland, John M.
Hunt, William Beall
King, John Theodore
Lambdin, Alexander M.
Leitch, William A.
Miller, Theodore Klein
Nelson, Victor Holmes
Rutter, George H.
Spieker, George Frederick
Sweeting, James K. P.
Tennant, David L.
Toner, Zachary Taylor
Webster, Thomas W.
Weil, Star Mayer
Westbrook, John A.
Wilson, James Patterson

1864.

Cook, Charles Oscar
Harrison, Alexander C.
McCarthy, John
McFarland, John
Orrick, Oliver S.
Pentland, John P. A.
Richardson, Standish Barry
Shannon, John
Simpson, John Wesley
Stehl, Gustavus Louis
Stewart, William Cooper
Westenberger, Zachary Taylor
Young, Charles

1865.

Bates, Edward Bayley
Bishop, Lamartine
Beckley, John T.
Frame, James
Haslup, John S. M.
Hoffman, Charles August
Hooper, Edward L.
Patten, Amos Williams
Saumenig, William B.
Smith, William Thomas
Tustin, Septimus P.
White, William A.
Wilcox, Alexander Martin
Yeisley, George Conrad

1866.

Brown, Emmet
Greenbaum, Daniel
Harvey, William Thomas
Houck, Derrick Keyser
Irvin, George Lawrence
Jones, John Edwin
Kennedy, Alvin Parker.
Lauer, Solomon
Miller, John Henry
Richardson, John Donovan
Troeger, Andrew

1867.

Appell, John Henry
Ball, David Emory
Chichester, William John
Crook, Thomas Walter
Dunlap, Henry
Gillaspey, George Washington
Halbert, Edward Driver
Leitch, Robert Rose
Maydwell, George Edwin
Miller, Daniel Schaffer
Miller, Elmer Slack
Miller, William Reynolds
Reid, Charles Egerton
Sumwalt, John W. Richardson
Supplee, James Franklin
Thomiz, Herman Washington

1868.

Campbell, John Samuel
Chapman, John George
Darrington, James
Dobler, John Jenkins
Farringer, Charles Henry
Faupel, John Jacob
Ford, Harry Jones
Frank, Marcus Aaron
Grove, Benjamin Franklin
Harkness, George Musgrave
Hartman, George Andrew
Jameson, William Davis
Kemp, William Frederick A.
Kirwan, George Washington
Neilson, Robert Musgrave
Sroud, William Henry
Storke, Seymour Bernard
Torsch, Edward Louis
Wiener, Charles Jefferson
Zimmerman, James Jacob

1869.

Alexander, Simon
Andrews, Charles Carroll
Clark, Albert Dickson
Clayton, William Elliott
Clunet, Louis Sebastian
Dew, Jabez
Evans, Henry Webster
Gallagher, John Joseph M.
Harris, Richard Armstrong
Hoffmann, Franklin Jacob
Keller, Harry Storm
Moore, George Washington
Phelps, Edward Pontany
Schubert, Edward
Shock, Philip Edwin
Snowden, Wilton
Swain, Benjamin Franklin
Turnbull, John William
Wells, Joseph Gist
Wiener, George Washington
Young, Charles Edward Milton

1870.

Armiger, William Lauderbaugh
Bartgis, Caleb Edwin
Cole, William Chester
Eilan, Emanuel
France, Henry Strickler
Jones, Walter
Kirwan, Samuel David
Lobe, Harry Isaac
Millar, James Howard
Nagle, Theodore
Nichols, William Albert
Parker, John
Thompson, William Partlow
Warfield, David Hiram
Young, George

1871.

Beadenkopf, Thomas Milton
Benson, William
Hall, Vernon
Hanzsche, Frederick Allen
Healy, Edward Joseph
Hebden, Edwin
Henschen, Charles Christopher
Hughes, Thomas
Hunt, Charles
Meyers, Charles Franklin
Nash, Charles Wesley
Pattison, Samuel
Pentz, William Hamilton
Sollers, Basil
Taylor, Joshua Douglas
Tumbleson, William Wallace
Weyfforth, William Oswald
Wilcox, Theodore Fillmore
Wilhelm, Lewis Webb

1872.

Bailey, George Frank
Blacklock, John Hewlett
Cooper, William Hall
Davis, William George
Deale, John Summerfield
Doyle, Daniel Henry
Farrow, Edward Samuel
Fisher, Charles August
Friese, Philip Henry
Geiger, John Willian Herman
Goodman, Jacob
Hollander, George
Juvenal, Decimus Junius
McElmoyle, John
Norris, Stephen Foxwell
Sultzer, Henry Clay

1873.

Bergner, William
Bernei, Simon
Bond, Alexander
Buschman, Francis Arago
DeLacour, Edward
Dosh, Homer Samuel
Early, William
Elliott, Thomas Ireland
Gwynn, Henry Bash
Lambright, Benj. Hartman
Laughlin, David
Marshall, Theodore Wm.
Morgan, Gerard Emory
Morgan, Yelverton Peyton
Morse, Thomas Robert
Murray, Arthur Daniel
Murray, Stockton Reese
Shirk, Henry
Smith, Richard Henry
Smyth, William Thomas
Toner, Lewis Cass
Wagner, Harry Milton
Watson, Charles Robert
White, John Alexander
Wilson, Charles Light

1874.

Chapman, Frank Selby
Cole, Samuel Spencer
Disney, Thomas Hargest
Forsyth, Robert Wright
Grauer, Simon
Hackett, William Medill
Hatch, Edward Richardson
Lederer, Lewis John
McCreary, George Washington
Nicolassen, George Frederick
Rowe, Robert Semple
Schaefer, William Henry
Schwartze, James Willis
Torsch, Frederick Adolphus
Watkins, Joseph Marion
Wiesenfeld, Bernard
Young, William James

1875.

Bernei, Louis Bernard
Berry, Charles C.
Borland, Thomas
Colmary, Abram H.
Cook, Stephen R.
Daneker, George Israel
Dare, Frank McKewen
Delahay, Hamilton
France, Robert Emory
Gans, Edgar Herr
Goodman, Edgar.
Haman, B. Howard
Lauer, Martin
Lyon, Ira Clinton
Magruder, Edward Boteler
Mitchell, Charles William
Morgan, Leigh Clinton
Nicholson, Joseph Carmich
Potts, Thomas Gallagher
Scott, John Gordon
Wicks, Edmond Gover

1876.

Adams, Howard Davis
Ash, David
Beck, Frederick William
Bond, Wallace
Boucsein, Gustavus Frederick
Brian, William Charles
Burgunder, Solomon Abraham
Clarkson, Walter Bernard
Cole, Lloyd
Downs, Howard Fletcher
Gilbert, Charles Henry
Goldman, Leon
Jacobi, Herman George
James, Charles Edward
Lauchheimer, Jacob Meyer
Lucas, Harry Fleming
Pentz, Clinton Taylor
Pfister, John Thomas
Rogers, James Smith, Jr.
Sewall, Douglass
Smith, Charles Coleman
Stricklen, Wiltz Raymond
Taylor, Charles Albert
Wynn, James Gould

1877.

Audoun, Milton Whitney
Ball, Thomas Randolph
Barnes, Manly Howell
Chenoweth, Harry Milton
Emich, Daniel James
Frisch, John Michael
Gallagher, John Michael
Geis, Edward Joseph
Grape, Jacob, Jr.
Lausdale, Robert Vinton, Jr.
Lauchheimer, Charles Henry
Marley, Luther Carville
Müller, Charles Augustus A. J.
Mitnick, Jacob Joshua Hiram
Noah, Isadore
Quinan, Allen Billingsley
Redgrave, DeWitt Clinton
Spieker, Edward Henry
Ziegler, Samuel Frederick

1878.

Chenoweth, Harry Milton
Grape, Jacob, Jr.
Geis, Edward Joseph
Lefevre, Walter

1879.

Bankard, Edgar Howard
Bayley, William Shirley
Block, Hiram
France, Joseph Chalmers
Heilig, John Carl
McDowell, Whitford Loane
Mitchell, Charles Lee
Porter, Henry Tegmeyer
Quinan, Johnstone Hamilton
Roberts, Howard Newcomer
Robinson, Adoniram Judson
Roth, William Jacob
Watson, Edward Louis

1880.

Albaugh, Harry Davis
Bandel, George Allen
Bringman, John George
Cohen, Lewis Jacob
Collmus, Jacob Henry
Garthe, Louis
Herman, Nathan
Miller, Chas. Wm. Emil
Rose, Douglas Hall
Shugard, George Frederick
Watkins, William Ernest

1881.

Diffenderfer, William Henry
Dryden, Robert Levi
Dunbracco, William Winfield
Frisch, Gustav
Garthe, John Henry
Gibson, Robert Fusselbaugh
Hatch, William Melville
Hopkins, Gerard Thomas
Lang, Richard Daily
Lodge, Gonzalez
McDaniel, Charles Thomas
McGee, Benjamin Franklin
Orndorff, William Ridgley
Robinson, Edward Levi
Walz, William Ferdinand

1882.

Berwanger, Henry B.
Burgess, William Nelson
Healey, Edward J.
Heinritz, George
Hunt, Judson
Lefevre, Arthur
Loane, James A.
Mann, Leon H.
Merryman, Charles G.
Meyer, Ferdinand A.
Norris, Rollin
Ryttenburg, Moses

1883.

Barrett, William L. K.
Brownold, Samson M.
Cummings, Edwin J.
Eichelberger, William S.
Frank, Simon
Gorton, William C. L.
Hannah, Samuel H.
Hartogensis, Benjamin H.
Hisky, T. Foley
Hunt, Arthur
Hunter, Thomas J.
Kelly, William H.
Kenly, William L.
Lambright, Wm. S.
Lloyd, John Howard
Lowenbach, Joseph
Maccaddin, William B.
Price, Harry W.
Smith, William F.
Taylor, Edward F.

1884.

Applegarth, Edward C.
Clunet, Nathaniel S.
Crouch, J. Frank
Disney, Irvin P.
Dreyer, George P.
Emmons, Howard M.
Jones, Walter
Keuley, Ritchie G.
Mathews, John O.
McPherson, J. H. T.
Meeth, Charles H.
Rasch, William Gustav
Rogers, William M.
Willis, Edward W.

1885.

Bell, John S.
Billups, Alfred M.
Black, James W.
Buschman, William G.
Gardiner, Isaac S. H.
Geoghegan, William B.
Hall, William H.
Harper, Charles E.
Miller, William Howard
Owings, Edward R.
Putzel, Lewis
Salmon, Louis E.
Sauerberg, John D.
Taylor, Franklin M.
Taylor, Harry G.
Thomson, Clarence G.

1886.

Booker, George S.
Bothe, Henry J.
Culver, Frank B.
Elliott, Robert W.
Foster, Allyn K.
France, John William
Greenbaum, Harry
Henschen, George N. C.
Lansdale, Joseph T.
Mansfield, Arthur D.
Morton, Daniel G.
Plitt, Charles G.
Stirling, James E.
Uhrbrock, Richard H.
Wacker, Oscar
Vickers, Albert
Weston, Benjamin L.
Whitehouse, George H.
Levi, Louis

1887.

Abercrombie, David T.
Atkinson, Louis W.
Bishop, Howard G.
Burch, William B.
Cook, Vernon
Goldsmith, Joseph
Goodman, Israel
Gradwohl, Simon
Hall, William A.
Hands, Joseph C.
Harrigan, John J.
Heindle, William A.
Hill, John E.
Himmel, Leon
Horstmeier, Albert W. A.
Koch, Charles J.
Lauchheimer, Sylvan H.
Lemon, Hanson T. A.
North, Samuel M.
Reich, James G.
Schott, Walter
Smith, Robert A.
Wright, Robert C.
Zeigler, O. Woodward

1888.

Base, Daniel
Bell, James William
Butler, Robert Lee
Coale, Carey
Cohen, Abraham
Fincke, Frederick Henry
Galloway, William Francis
Hamilton, Edgar
Howard, Charles McHenry
Leeke, Harry L.
Levy, William B.
Miller, Frederick William
Price, Robert W.
Rawlings, Joshua S.
Singer, Edwin E.
Stevens, Daniel G.
Sudler, Emory
Tressell, Walter E.
Watts, Sewell S.

1889.

Baldwin, Rignal W., Jr.
Bennett, Emory L.
Block, Simon J.
Brown, Thomas R.
Bullock, John S., Jr.
Cohn, Joel
Crouch, Alban B.
Davis, Edwin J.
Greenbaum, Leon
Hamburger, Jonas
Hammond, S. Augustine
Hancock, James E.
Henning, William T.
Hocheder, George
Lamotte, L. Howell
Latanè, John H.
Mann, Leonard J.
Moses, Jacob B.
Peppler, Charles W.
Polk, Anderson
Romoser, George A.
Salzman, Marcus
Sim, J. Glenn
Smith, George S.
Sommer, Martin S.
Stein, Charles H., Jr.
Stern, Leopold
Weston, Harry B.
Wilkinson, James W.

1890.

Baumgarten, Morris
Bonn, William Ewin
Burger, Louis
Clarke, Frank Angier
Dixon, T. Freeman
Dowell, Howard B.
Edmondson, J. Hooper
Forrest, Edwin
Getty, G. Albert
Green, Thomas F.
Havez, Jean C., Jr.
Kines, Edw. S.
Mullikin, Clayland
Paine, Charles H.
Pielert, Charles
Soper, Morris A.
Sparks, Francis Edgar
West, Henry S.
White, Wallace D.
Zoller, Henry, Jr.

1891.

Abercrombie, Harry Netherclift
Estep, Wyatt Wiley
Gibbons, Edward Engler
Jamison, Archibald Balloch
Jamison, Albert Clark
Otto, Charles Albert
Sanders, Thomas George
Scott, David Merrick

1892.

Billard, Frederick Chamberlayne
Gernand, Claude Seiss
Hazeltine, Rutledge Wood
Henderson, Harry Watts
Jackson, Arthur Lester
Kaufman, Marcus
Miller, Carroll Clifford
Moore, Charles Edgar
Nitzel, Henry Michael
Oliver, Edward Spiller
Robinson, John Andrew
Rogers, James Sappington
Ruppel, John Frederick Julius
Sewell, George Andrew Palmer
Strayer, Paul Moore
Strobel, Edgar Randolph
Waters, Campbell Easter
Wiesner, Harry Lee
Williams, Thomas Charles
Wright, DeCourcy

LAUREATES OF THE PEABODY FOUNDATION.

The following is a complete list of those graduates who, year by year, have received Peabody prizes:

1858.

Dorry, John Campbell
Miller, Henry Clay
Davenport, Thomas
Dell, John Everett
Baer, Thomas Sargent
Weatherby, Jeremiah Smith
Weber, Paul Ferdinand

1859.

Webster, Joseph John Gurney
Kelly, Thomas
McNelly, Hugh
Holmes, Thomas
Nagle, William
Peirson, Thomas George
Richardson, Charles Herbert

1860.

Johnson, Howard Edgar
Wolfe, Francis Eugene S.
Clark, Asbury Jones
Robinson, Oliver P.
Uber, Carlton A.
Prior, Philip
Cook, Wm. Wright Louis

1861.

Appleby, George F.
Cook, Gilbert C.
Torsch, Charles H.
Coburn, George
Ball, Thomas Sewell
Starr, William E.
Reeves, Charles H.

1862.

Towson, Henry Clay
Helfrich, Samuel Dutton
Westerman, Samuel Eggleston
Keller, Wilmer Lansfield
Storke, Alexander Lamb
Shutze, John Augustus
Dietsch, Ferdinand Frederick

1863.

Miller, Theodore Klein
Nelson, Victor Holmes
Wilson, James Patterson
Weil, Mayer Star
Spieker, George Frederick
Hunt, William Beall
Toner, Zachary Taylor

1864.

Simpson, John Wesley
Cook, Charles Oscar
Richardson, Standish Barry
McCarthy, John
Stehl, Gustavus Louis
Stewart, William Cooper
Young, Charles

1865.

Frame, James
Wilcox, Alexander Martin
Yeisley, George Conrad
Hoffman, Charles August
Patten, Amos Williams
Smith, William Thomas
Bates, Edward Bayley

1866.

Lauer, Solomon
Irvin, George Lawrence
Greenbaum, Daniel
Troeger, Andrew
Brown, Emmet
Harvey, William Thomas
Jones, John Edwin

1867.

Miller, Elmer Slack
Miller, William Reynolds
Chichester, William John
Leitch, Robert Rose
Gillaspey, George Washington
Thomiz, Herman Washington
Miller, Daniel Schaffer

1868.

Frank, Marcus Aaron
Dobler, John Jenkins
Campbell, John Samuel
Sroud, William Henry
Zimmerman, James Jacob
Torsch, Edward Louis
Storke, Seymour Bernard

1869.

Swain, Benjamin Franklin
Wiener, George Washington
Young, Charles Edward Milton
Turnbull, John William
Schubert, Edward
Wells, Joseph Gist
Clayton, William Elliott

1870.

Armiger, William Lauderbaugh
Young, George
Parker, John
Nagle, Theodore
Millar, James Howard
France, Henry Strickler
Jones, Walter

1871.

Tumbleson, William Wallace
Beadenkopf, Thomas Milton
Meyers, Charles Franklin
Nash, Charles Wesley
Pentz, William Hamilton
Wilhelm, Lewis Webb
Sollers, Basil

1872.

McElmoyle, John
Norris, Stephen Foxwell
Goodman, Jacob
Hollander, George
Friese, Philip Henry
Juvenal, Decimus Junius
Geiger, John William Herman

1873.

Morgan, Yelverton Peyton
White, John Alexander
Murray, Arthur Daniel
Morgan, Gerard Emory
Bernei, Simon
Shirk, Henry
Murray, Stockton Reese

1874.

Young, William James
Lederer, Lewis John
McCreary, George Washington
Hatch, Edward Richardson
Cole, Samuel Spencer
Schaefer, William Henry
Nicolassen, George Frederick

1875.

Bernei, Louis B.
Haman, B. Howard
Morgan, Leigh C.
Potts, Thomas G.
Nicholson, James C.
Goodman, Edgar
Lauer, Martin

1876.

Clarkson, Walter B.
Stricklen, Wiltz R.
Lauchheimer, Jacob M.
Pfister, John T.
Beck, Frederick W.
Burgunder, Solomon A.
Brian, William C.

1877.

Spieker, Edward H.
Müller, C. Augustus A. J.
Mitnick, Jacob J. H.
Lauchheimer, Charles H.
Chenoweth, Harry M.
Ziegler, Samuel F., Jr.
Geis, Edward J.

1878.

Chenoweth, Harry M.
Geis, Edward J.
Lefevre, Walter
Grape, Jacob, Jr.

1879.

France, Joseph C.
McDowell, Whitford L.
Heilig, John C.
Bankard, Edgar H.
Robinson, A. Judson
Bayley, William S.
Mitchell, Charles L.

1880.

Miller, Chas. Wm. Emil
Rose, Douglas H.
Garthe, Louis
Albaugh, Harry D.
Cohen, Lewis J.
Shugard, George F.
Bringman, John G.

1881.

Lodge, Gonzalez
Hatch, William Melville
Hopkins, Gerard Thomas
Gibson, Robert F.
Garthe, John H.
McDaniel, Charles T.
Orndorff, William R.

1882.

Meyer, Ferdinand A.
Ryttenberg, Moses
Norris, Rollin
Mann, Leon H.
Loane, James A.
Burgess, William N.
Merryman, Charles G.

1883.

Lambright, William S.
Smith, William F.
Gorton, William C. L.
Hisky, T. Foley
Brownold, Samson M.
Eichelberger, William S.
Lowenbach, Joseph

1884.

McPherson, J. Hanson Thomas
Crouch, J. Frank
Dreyer, George P.
Applegarth, Edward C.
Disney, Irvin P.
Meeth, Charles H.
Emmons, Howard M.

1885.

Miller, William Howard
Harper, Charles E.
Black, James William
Salmon, Louis E.
Taylor, Harry G.
Putzel, Lewis
Owings, Edward R.

1886.

Greenbaum, Harry
Culver, Frank B.
Elliott, Robert Wilbur
France, John William
Plitt, Charles Christian
Levi, Louis
Foster, Allyn King

1887.

Cook, Vernon
Bishop, Howard G.
Lauchheimer, Sylvan H.
Goldsmith, Joseph
Horstmeier, Albert W. A.
Schott, Walter
Koch, Charles J.

1888.

Cohen, Abraham
Galloway, William Francis
Watts, Sewell S.
Base, Daniel
Howard, Charles McHenry
Fincke, Frederick Henry
Leeke, Harry L.

1889.

Brown, Thomas R.
Stein, Charles H., Jr.
Greenbaum, Leon
Romoser, George A.
Salzman, Marcus
Stern, Leopold
Bennett, Emory L.

1890.

West, Henry S.
Bonn, William Ewin
Dowell, Howard B.
Clutz, Frank H.
Baumgarten, Morris
Soper, Morris A.
Burger, Louis

1891.

*No prizes were distributed this year, the conditions not having been met.

1892.

Oliver, Edward Spiller
Nitzel, Henry Michael
Jackson, Arthur Lester
Ruppel, John Frederick Julius
Billard, Fred'k Chamberlayne
Strayer, Paul Moore
Rogers, James Sappington

RECIPIENTS OF THE SHAKSPEREAN PRIZE.

1879.....Johnstone H. Quinan.
1880.....Douglas H. Rose.
1881.....Benjamin F. McGee.
1882.....Arthur Lefevre.
1883.....J. Edwin Cummins.
1884.....Irvin P. Disney.
1885.....John S. Bell.
1886.....Frank B. Culver.
1887.....Simon S. Gradwohl.
1888.....Edwin E. Singer.
1889.....William T. Henning.
1890.....Albert G. Getty.
1891.....Harry N. Abercrombie.
1892.....Paul M. Strayer.

Rules Relating to Baltimore City College.

I. COMMITTEE.

The legislative power over Baltimore City College shall be vested in the committee on said College.

II. FACULTY.

The faculty shall consist of a principal, vice-principal and such professors and tutors as may be necessary for the proper working of the College. Meetings of the faculty to consult in regard to the interests of the College and for the transaction of such business as may properly come before them shall be called by the principal at such times as he may deem necessary, or when requested to do so by two or more of the professors.

III. COURSE OF STUDY.

The full course of study for graduation shall extend over a period of five years, and shall include the English, French, German and Latin languages (Greek optional), History, Writing and Book-keeping, Arithmetic reviewed, Algebra, Geometry, Plane and Spherical Trigonometry and their applications, Analytical Geometry, Calculus, Physiology, Chemistry, Natural Philosophy, Astronomy, Rhetoric, Drawing, Political Economy and Civil Government.

Students who complete this course satisfactorily shall receive proper certificates.

IV. CURRICULUM.

The curriculum shall be as follows:

FIRST YEAR.

History of United States, History of England, Writing, Composition, Drawing, Natural Philosophy, English Literature, Latin, Book-keeping, Algebra, Geometry.

SECOND YEAR.

Composition, English Literature, Book-keeping, Natural Philosophy, Drawing, Latin, German, Geometry, History of Rome, Mensuration.

THIRD YEAR.

Rhetoric, Composition and Elocution, History of English Literature, Drawing, Latin, Chemistry, History of Greece, German, Greek (optional), French, Trigonometry and applications, Review of Mathematics.

FOURTH YEAR.

English Literature, Constitution of the United States, Chemistry, Latin, Greek, French, Surveying and Navigation, German, Drawing, Analytical Geometry, Astronomy, History of Eastern Nations, Composition, Civil Government.

FIFTH YEAR.

Latin, Greek, Calculus, English Literature, Logic, Mental Philosophy, Political Economy, French, German, Chemistry, Astronomy, Drawing.

No pupil shall be excused from any study as above arranged, without the consent of the committee; and any pupil who may be excused shall forfeit all right to contest for the graduating honors and prizes.

V. EXAMINATION AND ADMISSION.

There shall be an examination of candidates for admission to the Baltimore City College annually in the month of June, to be conducted in such manner as shall be prescribed by the Board, and the result of such examination shall be submitted to the Board as soon thereafter as practicable.

All boys in the eight grade of the grammar schools (not otherwise promoted) who are 14 years of age, of good moral character, and who shall pass an examination in the studies pursued in said eight grade to the satisfaction of the committee, shall be entitled to admission. Boys not pupils of the public schools may be admitted to the Baltimore City College upon the same conditions as the pupils of said grammar schools; and notice of this privilege shall be given in the daily papers at least ten days before each annual examination. If any admitted student should not take his seat in the College within *one week* from the beginning of the term, he shall not be entitled to admission, unless the delay be caused by sickness or unavoidable absence from the city.

No candidate who has been guilty of truant-playing, or any other grossly improper conduct during the scholastic year, shall be examined or admitted without the authority of the Committee on Baltimore City College; and it shall be the duty of principals to report all such candidates to the committee for its action.

Boys of fourteen years of age who are not pupils of the grammar schools may be examined for admission at such times and on such conditions as may be deemed proper by the committee.

No pupil who has been removed from Baltimore City

College shall be readmitted, unless by special action of the committee.

VI. DUTIES OF THE FACULTY.

The principal shall be charged with the government of the school and the general supervision of its studies, subject to the advice and direction of the committee. He shall also have charge of the rooms, furniture, library, cabinets, apparatus and other property of the school, and shall be accountable to the Board for the proper use and preservation of the same. At the close of each year he shall present to the board a report on the condition and wants of the school. In his absence, the vice-principal shall have charge of the school.

The professors, severally, shall be responsible for the improvement of their classes, and for the safe-keeping of the furniture, etc., of their class-rooms.

The professor of writing and book-keeping shall act as secretary to the faculty, and perform all the clerical work incident to said position, and to the preservation of the necessary records.

VII. DISCIPLINE.

The professors, in their respective departments, shall maintain order, enforce obedience and urge to application by such incentives as are consistent with these general regulations, avoiding at all times the use of harsh or opprobrious epithets.

Each professor shall keep a diary or register of conduct, in which he shall note any act of misconduct, whether ordinary or special, which occurs in his presence, or which comes properly under his notice, with the amount of his censure expressed in demerit marks. He shall leave his diary with the principal,

when required, once a week or oftener; and it shall be the duty of the principal to examine such entries and approve them, or (after consultation with the professor) make such change in said demerit marks as in his opinion shall be just, and then the same shall be carried into the demerit ledger; but all such changes which may not meet the approval of the professor shall be reported to the committee for its action, and such entry on the ledger shall be final, unless changed by a vote of the faculty or disapproved of by the committee.

The students are required to be punctual in their attendance, diligent in their studies, respectful and polite toward their teachers, kind and civil in their intercourse with each other, and to observe order and decorum in going to and returning from school.

Offences against the government of the school shall be classed as *ordinary* and *special;* the first including everything which hinders the progress of study, or is in its nature improper, and which might be avoided by due attention on the part of the student, but which is rather the result of carelessness than a deliberate purpose to offend; and the second including every kind of intentional misconduct.

The particular acts embraced under the class of ordinary offences shall be made known officially, from time to time, as the exigencies of the school may require; and for each of these offences there shall be, in the first instance, a demerit mark of one. If the offence be committed after a special warning by the professor, it shall be so recorded, and incur a demerit mark of two; and an additional demerit mark for each additional warning; provided, however, the demerit marks for this class of offences shall not exceed five.

The demerit for lateness and absence, when the detention is not occasioned by sickness, necessary attendance on the sick, or some equally imperative cause, shall be as follows: Lateness, ten minutes or less, one; more than ten minutes and not more than thirty, two; more than thirty minutes and not more than the first recitation period, three; any larger part of the day, four; absence a whole day, five. This does not include truant-playing, which is embraced under the head of special offences. When a student has been late or absent it shall be his duty, on his appearance in the school, to deliver to the principal a note, signed by his parent or guardian, stating the length and cause of such detention, in order that it may be judged of under this rule.

No student, after entering the school in the morning, shall leave, under any pretext whatsoever, before the close of the session, without the written permission of the principal; and it shall be the duty of the principal to record in his diary the name, the time, and the cause of such permission when granted.

When any offence has been committed which seems to require more than usual notice, the professor in whose presence it occurred shall either send the offender at once to the principal, or cite him to appear before the faculty, according to the grade of the offence; and every student shall promptly report himself to the principal, or answer his citation before the faculty, as required.

Every act of truant-playing shall, in the first instance, incur a demerit mark of 10 for each day of such absence, accompanied with admonition, public or private, according to the circumstances of the case; and if repeated after such admonition, the truant

shall be indefinitely suspended, and his case reported at once to the committee.

Any student presenting a note or other writing falsely purporting to be signed by his parent, guardian, or other responsible person, shall be deemed guilty of a very grave offence, and shall be dealt with by the committee in their discretion.

Any student losing, destroying or injuring any property of the Board, teachers, or of his follow students, shall make adequate pecuniary compensation, irrespective of whatever school censure the circumstances of the case may require.

The parents or guardians of pupils habitually indolent, or so irregular in their attendance as to prevent their advancement with their classes, will be requested to withdraw them, and in case of refusal, such pupils shall be reported to the committee for expulsion.

For any gross offence, which seems to require it, a student may be suspended by the principal, and the case reported immediately to the committee.

When the number of a student's demerit marks in one quarter amounts to 50, it shall be the duty of the principal to suspend him. If then the student and his parent or guardian appear before the faculty, and give such assurances as may lead them to believe there will be a decided reformation, they may, in their discretion, re-admit him on trial, or refer his case to the committee at their next stated meeting. Should he again, after such re-admission, accumulate 50 demerit marks before the end of the next quarter, he shall be indefinitely suspended by the faculty, and reported for dismissal to the committee at the next stated meeting.

All suspensions, whether by the principal or the

faculty, shall be recorded on the minutes. Students under suspension, as all others, are required to attend the term examinations.

A student may be promoted or degraded at any time by a vote of the faculty.

Each professor shall keep a daily record of recitations, estimating the value of each on a scale running from 0 to 100. At the end of the quarter these will be averaged. From the averages of the several professors a general average will be obtained, called the Quarterly Average of Scholarship. At the end of each term (the term consisting of two quarters) a rigid examination of the classes will be held in the studies of the term, and the results expressed numerically on a scale of 100. The average of these results, combined with the quarterly averages of the same term, will give the Term Average of Scholarship. The average of the term averages of scholarship for any given scholastic year will give the Annual Average of Scholarship. The average of scholarship for the fourth and fifth years will be the Final Average of Scholarship.

The marks of demerits which a student may have incurred during the quarter will be deducted from one hundred, which will give the Quarterly Grade of Conduct. The average of the two quarterly grades will give the Term Average of Conduct. The average of all the term averages will give the Final Average of Conduct.

The quarterly average of scholarship, combined with the quarterly grade of conduct, will give the Quarterly Average of Merit. The term average of scholarship, combined with the term average of conduct, will give the Term Average of Merit. The final average of scholarship, combined with the final average of con-

duct, will give the Graduating Average. The student whose graduating average is the highest, will stand No. 1, the one next highest No. 2, etc.

Unless otherwise arranged by the faculty, the student whose graduating average is the highest, *i. e.*, who stands No. 1, shall at the commencement deliver the honorary oration; the one who graduates No. 2, *i. e.*, whose graduating average is second in order of merit, shall deliver the valedictory; and the one who graduates No. 3, shall deliver the salutatory address.

The three students who stand the highest will each be entitled to a Peabody prize of the first grade (one hundred dollars), and the next four will each be entitled to a Peabody prize of the second grade (fifty dollars).

Those students in all the classes, whose term average of merit is not less than ninety, shall be ranked as Distinguished; and those whose term average is less than ninety, but not less than eighty, shall, in like manner, be ranked as Meritorious. The rank of graduates in this respect will be announced. For promotion from the first year to the second, the annual average of scholarship shall be sixty; from the second to the third, sixty-five; from the third to the fourth, seventy; from the fourth to the fifth, seventy; and no student will be allowed to graduate with his class whose final average of scholarship or whose graduating average falls below seventy; provided, however, that no student shall be allowed to graduate who shall fall below sixty in any one department of study. In addition to the above requirements for promotion, students must obtain an average of at least sixty in each study, but the faculty may in their discretion promote a student who is deficient in but one subject.

Those students who leave the College at the close of the scholastic year, not having finished the full course, but whose deportment and scholarship are up to the required standard for promotion to the next class, shall publicly receive a certificate of said standing, at the time of the distribution of the prizes and diplomas of the graduating class.

VIII. GENERAL RULES.

The rules and regulations for the public schools, both in regard to teachers and pupils, in so far as they are not superseded by the foregoing, shall be in force in Baltimore City College.

List of Books Used in Baltimore City College.

Allen (F. D.)—Euripides' Medea.
Allen (W. F.)—New Latin Composition.
Allen and Greenough—Ovid (with Vocab).
Alexander—Moral Science.
Boise—Homer's Iliad (first six books).
Bolmar (A.)—French Verbs.
Brandt—German Grammar.
Bowser—Analytical Geometry.
Chase (R. H.)—Maclean's Horace.
Chase & Stuart—Virgil's Æneid; Horace; Cæsar's Commentaries; Sallust (with Lexicon); Cicero's Orations (with Lexicon); and Livy.
Collier (W. F.)—History of the British Empire.
Crittenden—Blanks for New Elementary Book-keeping.
DeFivas—Elementary French Reader.
Dulany—Martin's Elementary Human Body; and Bill of Rights and Constitution of Maryland.
Dana—Text-book of Geology (revised).
Eliot & Storer—Qualitative Chemical Analysis.
Ely—Political Economy.
Flagg—Demosthenes' Hellenic Orations.
Goethe—"Egmont."
Goodwin (W. W.)—Greek Grammar; and Greek Reader.
Gildersleeve—Latin Grammar; Latin Reader; New Latin Primer; and Latin Exercise Book.
Gage—Elements of Physics.
Harper—Herodotus (cloth, 2 vols.)
Harrington (C. S.)—Plautus.

Haven (J.)—Mental Philosophy.
Heath—New German Dictionary; and New French Dictionary.
Hepburn—Manual of Rhetoric.
Joynes—Schiller's "Der Geisterseher."
Joynes-Otto—Introductory German Lessons.
Jones—Greek Prose Composition.
Johnson—United States History.
Kendrick—Xenophon's Anabasis (with Vocab).
Kendrick (J. B.)—Greek at Sight.
Keetels—French Series.
Liddell & Scott—Greek-English Lexicon (ab'd).
Lessing—Minna von Barnhelm (Students' Classic German Plays).
Lounsbury—English Language (Hand Book for Students).
Lockyer—Astronomy.
Loomis (E.)—Calculus.
Lippincott—Gazetteer of the World, with Supplement (sheep).
Myers & Allen—Ancient History, Part I; and History of Rome, Part II.
Noel & Chapsal—French Literature.
Ollendorff—French Method (Value).
Olney—General Geometry and Calculus.
Packard—New Manual of Book-keeping and Correspondence.
Prang—System of Drawing.
Quackenbos—Advanced Composition and Rhetoric; and first Lessons in Composition.
Remsen—Organic Chemistry; and Briefer Course in Chemistry (Am. Sci. Series).
Ray—New Higher Algebra.
Shepherd (H. E.)—History of the English Language.

Raddatz—Schiller's "Neffe Als Onkel."
Spencerian—Copy Books.
Shaw (T. B.)—New History of English Literature.
Sargent—Standard Speaker.
Tyler (W. S.)—Tacitus' Histories.
Tomlinson—Latin for Sight Reading.
Upham—Mental Philosophy (abridged).
Van Daell—Heine's "Die Harzreise."
Voltaire—History of Charles XII (18 mo.)
White (J. W.)—First Lessons in Greek.
White (J. T.)—Latin-English and English-Latin Lexicon.
Whitney (W. D.)—Brief German Grammar; Wilhelm Tell; and Essentials of English Grammar.
Westlake—How to Write Letters.
Wentworth (G. A.)—Plane and Solid Geometry (rev.); Plane and Spherical Trigonometry and Surveying with Tables; and Surveying and Navigation, with Tables.
Wilson (W.)—The State.
Webster — Dictionaries — International, and High School.
Zacho—New American Speaker.

REPORT

OF THE

Street Paving Commission,

TO THE

MAYOR AND CITY COUNCIL OF BALTIMORE.

REPORT OF STREET PAVING COMMISSION.

OFFICE OF THE STREET PAVING COMMISSION,

ROOM 208 EQUITABLE BUILDING,

BALTIMORE, May 21st, 1894.

Hon. Ferdinand C. Latrobe, Mayor of Baltimore:

SIR—Having been appointed a Street Paving Commission by the Mayor and City Council of Baltimore, by ordinance adopted October 14, 1893, to investigate the cost of Belgian block, sheet asphalt and asphalt block pavements in New York, Philadelphia, Boston, Washington, Buffalo and Baltimore, and having performed the services exacted by the ordinance, we herewith submit our report to your Honor as directed, together with such recommendations concerning the question of street paving as our observations and examinations have prompted.

With the view of making the investigation as complete as possible in every detail, we engaged the services of Captain G. J. Fiebeger, Corps of Engineers, U. S. A., who accompanied us when making our various visits of inspection, and who gave us the benefit of his professional advice, based upon extensive experience and well-founded convictions in that class of municipal work.

We are gratified to state that in our quest for information in the various cities enumerated in the ordinance, that every possible assistance was rendered by the well-informed officials who were assigned by the mayors of the respective cities which we visited in our efforts to procure reliable and accurate data. This is verified by the vast fund of information which will be found in the report, covering, we believe, every point of vital importance pertaining to the question of municipal street paving.

Very respectfully,

Hon. James Hodges, *Chairman*,
David L. Bartlett,
Charles Goldsborough,
Douglas H. Thomas,
Harry A. Parr.

From observations of the methods and results attained in the different cities visited by us, we have the honor to submit the following recommendations :

1. *That all streets paved, all streets repaved and all repairs of asphalt and asphalt block pavements be made by contract after due advertisement.*

We find this method carried out in all cities visited, and under proper inspection the results are very satisfactory. The paving of streets in this city with granite blocks by hired labor adds much to the labors of the small office force of the City Commissioner, without compensating results in the character of the work done or reduction in cost.

Work in Washington costing over $1,000 must be advertised in one Washington paper, and work costing over $5,000 in one paper in each of the following cities, Washington, Baltimore, Philadelphia and New York.

2. *That repairs to all pavements, except asphalt, asphalt block, and the construction and repair of macadam roads, be made by hired labor, unless the repairs constitute a repaving.*

This method is followed in all the cities visited, except Philadelphia. It enables repairs to be made promptly and prevents disputes which must necessarily arise under any contract for this kind of work.

3. *That no new or original pavements be laid except with asphalt, asphalt block, granite or brick.*

We find that cobble and rubble pavements are no longer being laid in any first-class cities. The cobble and rubble removed from the streets can be used for gutters in the suburbs or otherwise disposed of by the city. We would except from this provision macadam for suburban roads.

4. *That sheet asphalt pavements be laid upon either a six inch concrete base, a four inch concrete base, or the existing pavements of cobble and rubble.*

The six-inch concrete base we find is the standard sheet asphalt pavement laid; but good results at reduced cost are attained by the use of the four-inch base upon streets not subject to heavy travel, and, also, by paving with asphalt over cobble, rubble and macadam. A crown of six inches for a roadway thirty feet wide, we do not find excessive for paving over cobble, etc.

5. *That asphalt block pavements be laid upon the natural foundation of the roadway, properly rolled, if of satisfactory material; otherwise upon a bed of gravel, properly rolled, at least five inches thick.*

The former practice we find gives good results where the natural foundation consists of sand or gravel, and the latter where the foundation is clay or loam.

6. *That the foundation of granite block pavements, except upon the most heavily traveled streets be prepared as described for asphalt blocks, and that the joints be filled with clean gravel and be pitched with coal tar, paving cement, or grouted with Portland cement.*

We find that the best paving cement has added to it about 10 per cent. of Trinidad asphalt.

The best granite block pavements are laid upon a concrete base; we do not recommend this base simply on account of its cost, taking in consideration the very limited area of good pavements in this city as compared with the others visited. This also applies to asphalt block pavements.

7. *That all brick pavements be laid upon a concrete base, at least four inches thick, and have joints grouted with cement.*

Cement is preferred on account of the tendency of coal tar to run in hot weather.

8. *That the foundation for all pavements, after being properly graded, be rolled with a roller weighing not less than five tons.*

9. *That all pavements be guaranteed and kept in repair for five years by the contractor under such bond or retain as seems best.*

We recommend the wording of the guarantee in the *Buffalo specifications. It is probable that a bond would be equally as satisfactory from a reliable contractor, and add less additional cost to the pavement than a retain.

We do not recommend a longer guarantee, as it has not yet been satisfactorily determined what the allowance per square yard should be for maintaining

* See page 67.

pavements after the end of five years. The city of Omaha has a contract with the Barber Asphalt Paving Company for keeping pavements laid by them in repair for ten years following the period of guarantee for eight cents per square yard per year, and we were informed that a perpetual guarantee was offered the city of Buffalo at the same rate.

The five year guarantee should not materially increase the cost of any pavement, as the repairs on a well-laid pavement during this period *are* very slight.

10. *That specifications now requiring the use of Trinidad lake asphalt be worded so as to allow the use of "any other asphalt which has been found by experience equally as good for paving purposes."*

While we do not believe in experimenting with any untried material, we find that different cities are experimenting with several different kinds of native and foreign asphalts, one or more of which may be found equal to the Trinidad. If considered advisable, additional bonds may be required of the competitors guaranteeing to replace the pavement with Trinidad, should this pavement prove inferior to those laid with Trinidad asphalt within five years. A guarantee of this nature was given by Mr. Thomas, who laid some pavements of Bermudez asphalt in Washington last year, and he further guaranteed that the cost of repairs should not in ten years exceed the cost of Trinidad asphalt pavement laid the same year.

11 *That smooth pavements be laid wherever possible.*

The best paved and swept cities we saw on our tour of inspection, were those having the largest area of smooth pavements. The advantages of these pavements seemed to be best appreciated by the citizens of Buffalo, where they are laid upon the petition of and at the expense of the property owners.

We found these pavements laid upon many streets where there was hardly a dwelling on account of the increase in value they gave to the abutting lots. In the suburbs of Washington there are also many streets paved at the expense of the property owners who desire these improvements and could not get them out of the general fund for several years.

Other pavements were laid in Washington by the property owners paying one-half the total cost in advance, and at present an effort is being made to secure a law whereby a pavement may be laid and assessed against the abutting property whenever over one-half the abutting property is represented by a petition for the same. In Buffalo the petition must be signed by a majority of the resident owners representing at least two-fifths of all foot frontage. The best streets for smooth pavements are those unobstructed by street railway tracks and having a grade not exceeding four per cent.

12. *That all underground work and sewer and water connections be laid before a street is paved, and that no new pavement be disturbed for one year after its completion.*

These provisions are enforced in Philadelphia,

Buffalo and Boston, and legislation covering the same ground is now being sought in Washington. The advantages are obvious.

13. *That no street be opened for any purpose without a permit and a deposit sufficient to cover the cost of repairs.*

This is the practice followed in New York and Washington and to be enacted in Philadelphia. In Boston and Buffalo a permit and bond are required, but the results are not so satisfactory.

14. *That upon future street railway extensions, a full grooved girder rail shall be used upon all paved streets.*

This rail was adopted by Congress for the streets of Washington and has given great satisfaction.

15. *That the cost of the new granite curb, which constitutes part of the sidewalk, be assessed against the abutting property.*

16. *That the repavement of streets be made in accordance with the definite plan prepared in advance, showing the character of the pavement proposed to be laid upon each street and the order in which streets should be paved.*

If deemed advisable, a board could be appointed to draw up this plan and revise the specifications to conform to the best practice of other cities.

It is suggested that the City Commissioner embody in his annual reports the detailed expenditures upon each street, copies of all bids received, and specifications for street work.

. . . . . .

There is appended to this report: 1. Tables showing the relative cost of pavements in the different cities visited. 2. A report upon each city separately.

The tables have been made up from the best available data; in some of the cities the prices vary on the different streets, making it difficult to get a basis of comparison. In the reports on the different cities, there is given a brief outline of the organization of the department having charge of the street improvements, the appropriations and amount of assessment, and the method and cost of laying the pavements.

Hon. James Hodges, *Chairman.*
David L. Bartlett,
Charles Goldsborough,
Douglas H. Thomas,
Harry A. Parr.

NEW YORK.

The appropriations which are provided for the extension and maintenance of the roadways of the city of New York are six in number, as follows:

1. *Street Improvement Fund.*

This is a fund used for grading, regulating, kerbing and paving new streets. To raise it the comptroller sells enough New York City bonds or stock to defray all cost of such improvements as may be annually authorized by the Board of Estimates and Apportionment.

After the work is completed the cost of the work is assessed against the abutting property, and the proceeds of the assessments are used to redeem the stock and bonds provisionally sold.

The cost of the first improvement, including the entire cost of the first pavement, is assessed against the abutting property. The pavement once laid is kept in repair and renewed by the city. For this purpose there are two permanent funds.

2. *Repaving Streets and Avenues.*

Under chapter 321 of the Consolidated Act of 1882, the Commissioner of Public Works is allowed

to expend a sum for repavement not to exceed $500,000 annually; the streets being selected by the Board of Aldermen. It is, however, seldom that the Board of Estimates and Apportionment allows for this work more than $250,000 to $300,000.

This fund being found entirely inadequate to the needs of the city, and the pavements becoming hopelessly out of repair, in 1889 authority was obtained from the State Legislature to expend the sum of $3,000,000 for repaving in annual allotments of $1,000,000; in 1892 this sum was increased by $3,000,000 expendable in two years, making a total of $6,000,000.

It is out of this temporary fund that the principal work is now being done in the city of New York.

3. *Repairs and Renewal of Pavements and Regrading.*

This appropriation is set aside each year by the Board of Estimates and Apportionment for making repairs to pavements; the maximum allowed by law is $500,000, but this amount is seldom set aside by the Board.

4. *Boulevards, Roads and Avenues—Maintenance of.*

5. *Roads, Streets and Avenues unpaved—Maintenance of and sprinkling.*

These appropriations are set aside by the Board of Estimates and Apportionment for the repair of the streets graded and open to traffic, but not paved, the maintenance of the macademized driveways, and for sprinkling the streets and driveways during the summer months.

6. *Restoring and Repaving—Special Fund.*

This fund is derived from the amounts paid in by plumbers and others for permission to make house connections, and is employed in repairing the cuts made by these parties.

AREA OF STREET PAVEMENTS.

The total area of the street pavements on December 31, 1892, is given in the Annual Report of the Commissioner of Public Works, as follows:

KIND OF PAVEMENT.	SQUARE YARDS.	PER CENT	MILES.
Specification Granite	3,037,511.67	35.5	140.02
Asphalt	764,353.26	8.9	37.96
Square Granite	653,106.00	7.7	25.24
Specification Trap	1,210,344.83	14.2	65.23
Belgian	2,073,539.77	24.2	82.78
Cobble	25,046.54	0.3	0.87
Macadam	792,529.30	9.2	21.44
Total	8,566,431.37	100	373.54

Nearly one-third of this amount, including all the asphalt and over one-half of the best granite has been laid in the five years ending December 31, 1892.

When the act of 1889, appropriating $3,000,000 for repaving, became an assured fact, the Commissioner of Public Works, now Mayor Gilroy, had a thorough investigation made of the subject of street pavements, both in this and foreign countries, to determine the best class of pavements applicable to the various conditions of New York city. As a result of the investigation, it was determined that the future pavements of the city should be confined to three classes.

1. Granite block pavement, upon concrete base, for streets of heaviest traffic.

2. Granite block, upon sand and gravel, for business streets of light traffic.

3. Asphalt pavements upon residence streets, and upon some of the boulevards. For sanitary reasons it was afterwards decided to pave the tenement districts with asphalt.

It is probable that were economical considerations discarded, only the first and last classes of pavement would be laid.

Mayor Gilroy stated that the asphalt pavements were rapidly growing in favor, and now hardly any applications were received for any other class of pavement upon resident streets. The horses were becoming accustomed to them, and the objections first made against their being slippery had almost ceased. It was true that for about ten days in the year, they were very slippery, but the comfort of the other 355 more than balance the discomforts of these few.

The first asphalt pavements laid were of the classes known as rock asphalt, Trinidad lake and Trinidad land or overflow asphalt, but for some time only the second class has been laid.

The following pertinent remarks upon the uses of asphalt are taken from the report of Stevenson Towle, Consulting Engineer, for 1892.

"A large portion of the asphalt pavements laid were in the tenement districts. They have been greatly appreciated by the poor tenants, adding much to their comfort and aiding in keeping these neighborhoods freer from contagion and sickness. They are easily kept clean, and during the summer were frequently flushed with Croton water, the washing doing no injury to the sewers.

The flushing after sweeping of all the asphalt pavement could be done without in any way obstructing the sewers, for the reason that this street dirt is principally the droppings from horses which is soluble or readily carried off by the sewage.

During the past four years I have carefully observed the traffic on the several asphalt pavements with the view of determining if there was any difference in the slipperiness in the two kinds in use, one composed of Trinidad asphalt and sand, the other the imported natural rock asphalt.

My examination was not confined to thoroughfares subject to business travel, but to all other streets subject only to light travel. It was particularly noticed

that horses slipped and fell more frequently on pavements of the natural rock asphalt than on pavements of the Trinidad asphalt.

While making this examination as to the slipperiness I carefully noted the comparative wear of the two kinds of Trinidad asphalt in use. One pavement is composed of asphalt from the Pitch Lake, Island of Trinidad, the other composed of asphalt from the "overflow" deposits on the Island of Trinidad.

The difference in the durability and wear of the two kinds is very marked.

The pavements made from the "overflow" asphalt, especially those subjected to business travel, require constant and expensive repairs, while pavements laid with the Pitch Lake asphalt require much fewer repairs and are generally in better order and more durable.

I am satisfied that it will be for the city's interest to discontinue the use of the imported natural rock asphalt in pavements and also to discontinue the use of the "overflow" asphalt from the Island of Trinidad, and to use only asphalt taken directly from the Pitch Lake.

The failures of pavements laid with the "overflow" asphalt have determined several large cities in this country to use only the asphalt from the Pitch Lake and so specify in their specifications for asphalt pavements.

Surveys have been completed for the pavements it is proposed to lay during the year 1893.

A large portion of the appropriations it is proposed to use in improving the old pavements in the tenement districts by laying asphalt pavements. Streets most in need of sanitary improvement have been selected."

Special pavements are allowed to be laid at the expense of the parties interested. A few squares of asphalt block have been laid in this manner.

METHOD OF LAYING PAVEMENTS.

All work is done by contract, and the specifications are so worded that all incidental work, such as removing old material, resetting kerb, adjusting manholes, etc., shall be included in the price per square yard for the pavement. The only extra items are furnishing and setting new kerb, and furnishing and setting bridge stones.

GRANITE BLOCK PAVEMENTS UPON CONCRETE.

The street having been excavated to a depth of 16 inches, and rolled or rammed, a concrete bed six inches thick is laid. The concrete consists of one part Portland cement, three of sand and seven of broken stone; or, one part Rosendale, two of sand and four of stone. A portion of the broken stone may be replaced by good, clean gravel. Next comes a bed of sand in which the paving blocks are set to true grade. The stones must be good, durable granite, from 8 to 12 inches long, 3½ to 4½ wide, and from 7 to 8 inches deep. Each course of blocks must be of same width and depth and so paved that end joints shall be close while

the joints between successive courses shall not exceed one inch in width. The blocks are then covered with artificially dried gravel, ranging in size from one-half to three-quarter inches, and rammed. The interstices are filled with paving cement composed of 20 parts of refined Trinidad asphalt, 3 parts of residuum oil and 100 parts coal tar residuum. Loose gravel is then spread over the joints and consolidated with a light hammer or otherwise.

The contractor furnishes all material and guarantees and keeps in repair his work for six months; should the six months expire between December 1st and April 1st, the guarantee is extended to April 15th.

The price paid averages about $3.80 per square yard, but on Waverly place, the specifications of which were examined, the price was only $3.41 per square yard.

Granite blocks upon sand foundation are similarly laid; the excavation being only to a depth of ten inches and the joints simply filled with sand. The price is about $2.50 per square yard, which is that of 156th street, specifications herewith transmitted.

ASPHALT PAVEMENTS.

The specifications allow of the use of foreign rock asphalts and Trinidad Lake asphalt. The pavement is laid upon a six-inch concrete base, upon the original trap and other block pavements and upon macadam. The wearing surface, if of Trinidad Lake asphalt, consists of one inch of binder and two inches of asphalt, prepared in accordance with what are known as the "Washington Specifications."

If rock asphalt is used, the binder has a thickness of one inch and the wearing surface two and a half inches, after compression.

The specifications allow the use of coal tar residuum or asphalt in the binder; the Washington specifications, only asphalt.

The cross section of the street is ordinarily parabolic, and has a crown equal to 1-72 to width of the street. The height of the kerb above the pavement is five inches.

Adjacent to the rails of street railways, around manholes, etc., is paved a row of granite blocks as headers and stretchers, as described for granite block pavements.

Asphalt pavements paid for by the city must be guaranteed for fifteen years, and during that time all repairs must be made by the contractor within forty-eight hours after notification by city authorities.

To insure compliance with these conditions, the contractor receives after the completion of his work only seventy per cent. of the amount due him; the balance is paid in annual installments of three per cent. a year, beginning at the close of the sixth year.

If the cost of the pavement is assessed against the property owners, the guarantee is for five years only, so as to reduce the first cost. No sum is retained upon these payments.

The cost of the fifteen year gaurantee pavements is said to average about $3.80 per square yard, but depends upon the probable wear. Upon Wall street it was $5.20, and in the tenement district $4.00 per square yard.

The cost of the five year guarantee pavements are from $3.08 to $3.19 per square yard.

Specifications are herewith transmitted for paving the Boulevard upon macadam under fifteen year gaurantee, the price being $3.85 per square yard, and 144th, street upon concrete base, with five year guarantee, the price being $3.19 per square yard.

The asphalt pavements laid in New York, with the exception of the land asphalt, appear to be well laid, and it is reported that out of sixty streets paved in 1889, fifty-six have required no repairs, and four only a few minor ones, to keep them in good condition.

OLD MATERIALS.

The specifications require that all old material which could be of any future use, such as old blocks, cobble and bridge stones should be reserved by the city and deposited by the contractor wherever required.

KERB STONES.

These are of North River bluestone, three feet long, five inches wide and twenty inches deep. The price paid is fifty cents and fifty-five cents per linear foot in place.

BRIDGE STONES.

These must be equal in quality to the best North River bluestone, four to eight feet long, two feet wide and of uniform thickness from six to eight inches. The top is dressed and edges square. The price is from fifty to sixty cents per square foot in place.

SIDEWALKS.

These are laid and maintained by and at the expense of the abutting property owners.

STREET RAILWAYS.

There is no uniform requirement of the paving to be done by street railways. The maximum is between rails and tracks and two feet outside and the minimum nothing. As a rule the recently constructed roads use a tram girder rail and pave with granite blocks either on concrete or sand.

REPAIRS.

Granite and other block pavements are repaired by hired labor. During the year 1892 the repair force averaged 178 mechanics, 202 laborers, 60 horses and carts and 3 teams. The work consisted in taking up and relaying 357,965 square yards of pavement, 860 cross-walks and 5,100 bad places in streets.

The asphalt pavements have not passed the guaran-

tee period; the only repairs were the relaying of portions of pavements destroyed by bon-fires. This work was done by contract, at regular contract prices.

STREET OPENINGS.

For the purpose of making house connections, gas, steam, water and electric light subways, 16,616 openings were made in the pavements. In granite block pavements these were repaired by the city employees, the plumbers being required to deposit $8.00 for the first yard, and $4.00 for each additional yard of pavement cut. Openings in asphalt pavements are repaired by the contractor at $4.50 per square yard.

CONTRACT AND HIRED LABOR.

All work is done by contract, except the repairs to pavements and care and maintenance of the macadamized streets and improved roads.

Special attention is paid to inspection; one to three inspectors being assigned to each piece of work. Their pay is $3.50 per day.

The pay of hired labor is fixed by law at $2.00 per day for eight hours work; the ordinary price paid by contractors varies from $1.50 to $1.75 per day.

SELECTION OF STREETS TO BE PAVED.

The selection of streets to be paved is generally with the Department of Public Works. Petitions for this work are received from the property owners and

examined by the Water Purveyor, the Consulting Engineer and Assistant Engineer; the schedule is prepared in accordance with their recommendations.

ORGANIZATION.

The public works of the city of New York are under the Commissioner of Public Works, appointed by the Mayor. The various heads of bureaus appointed by the Commissioner under that department are as follows:

1. The Chief Clerk.
2. The Chief Engineer of the Croton Aqueduct.
3. The Water Purveyor.
4. The Engineer in charge of Sewers.
5. Superintendent of Street Improvements.
6. Superintendent of Streets and Roads.
7. Superintendent of Lamps and Gas.
8. Superintendent of Repairs and Supplies (of buildings).
9. Superintendent of Incumbrances.
10. Water Register.

Other employees of the department are appointed by the Commissioner, subject to examination by the Civil Service Board.

The total appropriation for this department for 1894 is $3,061,960, of which $355,460 is set aside for salaries.

The special bureaus having charge of street work are under: 1. The Water Purveyor; 2. The Superin-

tendent of Streets; 3. The Superintendent of Street Improvements.

The first has charge of the laying and repairing of all roadway pavements, and also the repairing and renewal of water pipes, stop-cocks, etc., and public hydrants.

The second has charge of the macadamized roadways and unpaved streets open to travel.

The third has charge of the grading, regulating, kerbing, etc., of the unimproved streets.

The permanent force of the first division consists of one consulting engineer, one assistant engineer, two transitmen, two levelers, four rodmen, one draughtsman and fifteen assistants in surveying.

EXPENDITURES FOR 1892.

Street Improvement Fund—Grading, etc.	$241,628 56
Paving	372,920 11
Repaving streets and avenues, 1890, 1891, 1892	378,895 24
Repaving Laws of 1889 and 1892	906,394 58
Repairs and Renewal of pavements, 1890, 1891, 1892	341,580 84
Boulevards, avenues and roads—Maintenance of	89,998 82
Roads, streets and avenues, unpaved—maintenance of and sprinkling	29,999 70
Restoring and repaving—Special Fund	53,677 00
	$2,415,094 85

PHILADELPHIA.

The principal appropriations which are provided for the maintenance and extension of the roadway pavements of the city of Philadelphia are given below. They are taken from the ordinance making appropriations for the Department of Public Works for the year 1893, approved December 31, 1892.

Item 1. For salaries, Chief of Bureau of Highways and assistants.....	$ 38,470
Item 2. For paving intersections of streets and in front of unassessable property.	250,000
Item 3. For repairs to paved streets, to include asphalt streets and paving around lamp posts, fire-plugs and breaks for other municipal purposes in footways, to include patent pavements.....	175,000
Item 4. For repairing and maintaining improved streets, macadamized streets, roads, trunks, drains and bridges not exceeding eight feet span, and constructing new trunks and drains; purchasing material for and resurfacing macadamized roads, and putting cinders and gravel upon country roads.....	100,000

Item 4½. For resurfacing (certain named roads and turnpikes)..... $ 96,000

Item 6. For grading streets and roads.... 150,000

Item 13. For repairing paved and macadamized streets in which passenger railway tracks are laid; provided that if any of the passenger railroad companies shall neglect or refuse to repair any street or parts of streets after the expiration of ten days notice from the Director of the Department of Public Works, the said Director be and is hereby authorized and empowered to pole off such street or streets until the work is begun and finished, and repole off any of such streets whenever the said company shall discontinue the work; and any moneys expended by the said Department, either in poling off or repairing said streets, shall be collected from the said passenger railroad company; provided, also, that the Director is allowed to expend said sums without advertising..... 15,000

Item 15. For grading, paving and repairing footways, kerbing and resetting kerbs in front of city property..... $7,000

Item 16. For crossing gutter and tramway stones, and repaving and repairing small and tramway streets with improved pavement wherever the Di-

rector of the Department of Public Works may deem the same necessary; Provided, That in repairing tramway streets when from one intersection to the next a majority of the tramway stones are broken or worn out, the Director of the Department of Public Works may substitute from kerb to kerb of said streets granite block pavement with pitch cemented joints; and provided, That in repairing gutters where the present gutter stones from one intersection to the next are unfitted for the purpose, the Director of the Department of Public Works may pave the said gutter with granite blocks and pitch cemented joints, and payment for the above mentioned labor and material shall be made from this item $40,000

Item 17. For carriage hire and keep of horses for Bureau of Highways..... 5,200

Item 20. For Inspectors at the rate of $75.00 per month, when actually employed 10,000

Item 22. For stone and iron cross gutters 2,000

Item 23. For curved kerbing and adjusting inlets 15,000

Item 24. For repaving certain streets occupied by street railways, provided, That the Director of the Department of Public Works first notify the railway companies occupying said streets to repave so much of said streets as are occupied by them, and after neglect or refusal so to do, the city shall repave the same, and the City Solicitor is hereby directed to institute proceedings to recover the cost of the aforesaid work from the several railway companies where tracks occupy the streets	$56,000
Item 26. For abolishing certain grade crossings of (steam railroads).....	30,000
Total....	$989,670

The remaining appropriations for the Bureau of Highways amounting to $155,758 are devoted to repairs of sewers, bridges, contingencies, etc.

In addition to these regular appropriations, there was allotted to the Bureau of Highways, April 7, 1893, the sum of $1,250,000 derived from a special loan of $3,500,000. Of this amount, $550,000 was assigned to the repaving of streets not occupied by street railways; $300,000 to the repaving of Broad street and the remaining $400,000 to the repaving of streets twenty feet or less in width between kerbs. This makes the total appropriation for streets about $2,250,000. The aver-

age annual expenditures for the six years ending June 30, 1892, is given as $1,110,000.

The original grading of the streets is done by the city; the sidewalks by the property owners. The first pavement is laid at the expense of the abutting property owners; the street intersections, from building line to building line, being paid by the city. The pavement once laid must be kept in repair and relaid by the city; upon streets occupied by street railways, the repairs and repaving are made by and at the expense of the street railway companies.

Where pavements are laid at the expense of the abutting property owner, the assessments are not collected by the city, but the contractor is paid in bills against the property owners which the contractor must collect. The estimated cost of this work does not therefore appear in the appropriations.

AREA OF STREET PAVEMENTS, JANUARY 1, 1893.

KIND OF PAVEMENT.	SQUARE YARDS.	PER CENT.	MILES.
Block	2,222,122	19.5	160.1
Sheet Asphalt	778,125	6.8	42.2
Asphalt Block	189,000	1.7	18.9
Vitrified Brick	672,000	5.8	40.0
Rubble	1,610,000	14.1	114.8
Cobble	4,830,000	42.3	344.9
Macadam	1,124,640	9.8	98.9
Total	11,425,887	100.0	819.8

The roadways in Philadelphia being generally nar-

row, the mileage is considerable as compared to the area.

Prior to 1882, and practically prior to 1885, the authorities were allowed to assess only for cobblestone pavements. The improved pavements have been laid since that date, and in fact all the sheet asphalt, vitrified brick and over half the block in the last six years. It was stated by Mayor Stuart that of all the pavements the asphalt was growing most rapidly in favor, and that many of the streets originally proposed for granite block paving were now being paved with that material.

The interest which is taken in this subject by the authorities is shown by the following ordinances approved April 7, 1893, the substance of which are as follows:

1. Granite block pavements shall hereafter be laid on a six inch concrete base with pitched joints.

2. Vitrified brick pavements shall hereafter be laid upon a four inch concrete base with joints cemented with Portland cement.

3. Water mains and connections to the kerbs shall be laid before a street is paved or repaved.

4. Sewers or connection to the kerbs shall be laid before a street is paved or repaved.

5. That gas mains with connections to the kerb shall be laid before the street is paved or repaved.

6. Unauthorized persons are prohibited from setting and resetting kerbs.

The results must be beneficial to the condition of the paved streets of the city.

METHOD OF LAYING PAVEMENTS.

All work is done by contract, and if done under the assessment plan, must be guaranteed for three years; and if paid by the city for five years. Ten per cent. of the amount due the contractor under his contracts must be deposited in interest bearing bonds with the City Treasurer to ensure compliance with the guarantee. This amount is returned to the contractor at the end of the five years. The grading is included in the price of the pavement.

GRANITE BLOCK PAVEMENTS.

Granite block pavements upon six inch of concrete are laid substantially as in New York city; the price varies from $3.85 to $4.00 per square yard. When inferior blocks, known as Pennsylvania or Lambertsville blocks are used, the cost is $3.60 to $3.65 per square yard.

Granite block pavements similarly laid upon four inches of concrete cost about $3.65 per square yard.

Granite block pavement upon a bed of six inches of gravel, with gravelled or sanded joints, costs about $2.75 per square yard, and with Pennsylvania or Lambertsville blocks, $2.50.

SHEET ASPHALT PAVEMENTS—TRINIDAD LAKE.

Sheet asphalt upon concrete base.—These pavements are laid substantially under the same specifications as

those in New York. Coal tar is used in the binder instead of asphalt, as is the practice in New York.

The price given for eight-inch base on Broad street was $3.15 per square yard; upon six-inch base the price has varied from $2.60 to $2.95; upon four-inch concrete, $2,65, and upon a base of broken stone covered with tar four and a half thick (bituminous base), $2.42 to $2.50; upon macadam, $2.65.

Neuchatel asphalt pavement has cost from $2.75 to $3.00 a yard upon 5 inch concrete base, but only a small portion has been laid.

VITRIFIED BRICK.

Vitrified brick has been used since 1887. In the city proper it was laid upon a concrete base, as follows, for $2.25 per square yard.

The street is excavated to a depth of 9½ inches and a concrete base four inches thick is laid as for sheet asphalt or granite block. Upon this is laid a bed of sand, upon which the bricks are paved at right angles to the street except at the intersections where the courses are parallel to the street diagonals. The pavement is then rolled and finally grouted with a mixture of one part of Portland cement and one of clean sand. Preference is given to bricks or blocks provided with lugs or projections and grooves to hold the cement.

The same pavement upon a bed of nine inches of sand or gravel, with sanded joints, except near kerb,

where they must be grouted, costs $2.10 per square yard.

Upon very narrow streets, with roadways less than twelve feet wide, granolithic pavement is laid. It consists of a base of Portland cement concrete four inches thick, with a layer of granolithic two inches thick, composed of two parts crushed granite passing through half inch sieve and one part of Portland cement. The price is $2.30 per square yard.

OLD MATERIALS.

As a rule the old cobblestones are given to the contractor to be used in the concrete base. Other materials, if of value, are retained by the city.

KERB STONES.

The following classes of kerb are used in the city:

5x20 blue stone kerb is furnished and set for 75 cents per linear foot.

6x24 cut granite kerb is furnished and set for $1.25 per linear foot.

8x24 cut granite kerb (curved) is furnished and set for $2.85 to $3.00 per linear foot.

6x24 cut granite kerb (curved) is furnished and set for $2.50 per linear foot.

One noticeable feature of the kerbing is the intro-

duction of curves at the street corners. The radius of the curves is about two-thirds the width of the sidewalk.

For narrow streets this is an important improvement. Kerb, as a rule, is paid for by abutting property.

CROSSING OR BRIDGE STONES.

These are of granite, sixteen, twenty and twenty-four inches wide, four feet long, and six to eight inches deep. They are set in two inches of American, Portland or any equally acceptable cement mortar.

SIDEWALKS.

These are ordinarily laid and maintained by the property-owners. When these parties fail to lay them the city has the work done by contract and the cost is assessed against the abutting property. Brick is the ordinary walk thus laid and costs from 90 cents to $1.00 per square yard. Repairs cost for flag, $1.00 to $2.25; granolithic, $2.25 to $3.00, and brick from 50 to 60 cents per square yard. Other incidental work, such as resetting cobble and other pavements, costs 30 to 60 cents per square yard, and resetting crossing stone, 25 to 40 cents per square yard.

STREET RAILWAYS.

After a street occupied by a street railway is once paved, it must be kept in repair by the street railway company. The following provisions were introduced

into the ordinances recently enacted granting permission to these companies to use the electric trolley:

SECTION 2. Before any permits shall be issued by the Departments of the city of Philadelphia to proceed with the work of constructing the railway and trolley system authorized by this ordinance, the said railway company shall enter into an agreement or contract with the Mayor of the city (who is hereby authorized to execute the same on behalf of the city), which agreement or contract shall be in form approved by the City Solicitor, and shall, among other things provide: That the said railway company shall agree to keep, and maintain in good order, at all times, whether paved, macadamized or unimproved, all streets, avenues and roads traversed by its lines of railway and by its trolley system.

SEC. 3. That the said company shall, under the supervision of the Department of Public Works, repave in good, substantial and workman-like manner, with Belgian blocks or other improved pavement, as directed by ordinance of Councils, or by the Director of the Department of Public Works, and to be done in a manner to be prescribed by and to the satisfaction of the said department, all streets to be occupied by it not already repaved with such improved pavement, and also all other streets heretofore repaved with an improved pavement, the repaving of which is not satisfactory to the said department, said repaving to be done from kerb to kerb for such length of street as shall be occupied by poles and trolley wires, or other electric motive-power system; provided: That such repaving or repairing aforesaid shall not free the said

company from any other paving, repaving and repairing the streets occupied by it that may be required by any ordinance of Councils that has been passed, or that may be passed, or from any other duty or obligation resting upon it regarding paving and repairing that is incumbent on it under and in virtue of any Act of Assembly, and that fifty (50) dollars shall be paid into the city treasury by said company for printing this ordinance.

REPAIRS.

All repairs to paved streets are made by contract. The appropriation for this purpose is also used for repairing cuts made by the municipal authorities for gas and water main connections.

The prices paid for repairs to cuts are as follows: For asphalt pavement, $3.80 to $3.95 if the base is removed; and $2.00 per square yard if base is not removed; granite block about $2.43; asphalt block about $2.00 to $2.10.

STREET OPENINGS.

The amount deposited for making an ordinary plumber's cut is $4.00, no matter what the size of the opening may be. This amount does not cover the cost of making the repairs and the city is put to considerable expense for making the necessary repairs. The Street Department is now engaged in drawing up an ordinance to cover this defect.

DESIGNATION OF STREETS TO BE PAVED.

The streets to be paved are generally designated by the City Council. Those paved under the special loan were selected by the Director of Public Works.

ORGANIZATION.

The Public Works of the city are in charge of the Director of Public Works, appointed by the Mayor and approved by the Select Council. The various departments under the Director of Public Works are:

1. City Ice-boats.
2. Bureau of Gas.
3. Bureau of Highways.
4. Bureau of Lighting.
5. Bureau of Street Cleaning.
6. Bureau of Surveys.
7. Bureau of Water.

The heads of these bureaus are appointed by the Director of Public Works. Appointments are subject to competitive examination.

The bureaus having charge of the highways are the Bureau of Surveys and the Bureau of Highways. Under the former, the streets are laid out, the grades established and new bridges constructed, and measurements made of contract work. Under the Bureau of Highways, the work of grading, paving and repairing streets and repairing bridges is executed.

The permanent force in the Bureau of Highways

consists of one Chief, five District Commissioners and a Superintendent of Bridges, seven clerks, ten inspectors, one inspector of asphalt streets, one general inspector, one inspector of sewer repairs, two inspectors of street openings, one messenger and two yard watchmen.

For convenience the city is divided into five districts, and a District Commissioner with two assistants assigned to the inspection of each district. In addition, temporary inspectors are employed when necessary.

The contractor pays to the Bureau of Surveys the following charges: For furnishing grade stakes, one cent per linear foot for each line of stakes; for furnishing kerb stakes, two cents per linear foot; for measuring grading, one cent per cubic yard.

PRICES BID FOR PAVEMENT.

Asphalt pavement, 6-inch concrete base, $2.60 per sq. yd.
do. 4½-in. bituminous base, 2.50 do.
do. 4-inch concrete base... 2.65 do.
Reset crossing stones..... 30 cts. per lin. ft.
Reset cobble..... 50 cts. per sq. yd.
Furnish and set 6-inch granite kerb, straight..... $1.25 per lin. ft.
Furnish and set 6-inch granite kerb, curved..... 2.50 do.
do. 8-in. do. do. 2.85 do.
Reset old kerb..... 20 cts. do.
Eastern granite block upon 6-inch concrete base..... $3.85 per sq. yd.

Eastern granite block upon 4-inch concrete base	$3.65	do.
Lay new brick sidewalk	1.00	do.
Furnish and set 24-inch granite crossing stones	1.50	per lin. ft.
Furnish and set 20-inch granite crossing stones	1.25	do.
Lay vitrified brick pavement on 4-inch concrete base	2.25	per sq. yd.
Lay vitrified brick pavement on 4-inch sand base	2.10	do.

BOSTON.

The appropriations which are provided for the extension and maintenance of the roadways of the city of Boston are two in number.

1. *Paving Division Specials.*

These appropriations are derived from loans authorized by law and are used in paving or repaving streets. The annual report of the street department shows that $1,008,415.49 were expended under these appropriations from January 1, 1891, to January 31, 1892. The streets thus paved are paid wholly out of the appropriations and no part is assessed against the abutting property.

2. *Street Department—Paving Division.*

This is one of the regular annual appropriations and is divided into:

1. Maintenance and constructions of streets.
2. Sprinkling streets.
3. Removal of snow.
4. Execution of Courts.
5. Miscellaneous expenses, the principal of which are salaries, printing and stationery; purchase and repair of plant; purchase of horses, carts, &c., street signs and numbering. The expenditures under this appro-

priation from January 1, 1893, to January 31, 1894, amounted to $977,200.02. These were divided as follows:

For new work on streets	$119,695 77
For maintenance of streets	556,129 49
For street sprinkling	104,263 62
For removal of snow	102,410 86
For executions of courts (damages)	25,633 65
Miscellaneous	69,072 63
Total	$977,200 02

For the fiscal year 1894 there has been appropriated:

For paving division, street department	$800,000.00
For street watering	100,000.00

AREA OF STREET PAVEMENTS.

	MILES.	SQUARE YARDS.	PER CENT.
Sheet asphalt	4.73	87,226	1.09
Asphalt block	0.81	13,586	0.22
Granite block	77.68	1,677,451	21.19
Vitrified brick	0.36	3,638	0.04
Cobble	3.52	41,706	0.45
Telford and macadam	211.73	3,877,758	48.79
Gravel	136.00	2,245,034	28.22
	424.29	7,946,329	100.00

The striking feature of the Boston pavements is the large area of macadam as compared with the other pavements. It may be said in general terms that the business portion of the city is paved with granite and the residence portion with macadam. The asphalt

pavement is of recent introduction, about two-thirds of the total area thus paved being laid during the fiscal year ended January 1, 1892. The brick pavement was introduced in 1888, but the greater part was also laid in 1892.

METHOD OF LAYING PAVEMENTS.

Granite Block.

All granite blocks are purchased by the city and issued to the contractor. The average cost, delivered and inspected, is about $1.90 per square yard. The blocks come in two sizes, averaging 25 and 38 to the square yard. The larger are, however, preferred.

The dimensions are: Width, three and one-half to four inches; length, six to eight inches, and depth, seven and one-half to eight inches for the smaller; and width, three and one-half to four and one-half inches; length, nine to fourteen inches; depth, seven and one-half to eight inches for the larger.

Granite Blocks Upon Concrete.

The street is graded to sub-grade and rolled. All old paving material is hauled to city property yards. The concrete bed is six inches thick and mixed in proportion of one, two and five. The bedding sand must be free from pebbles exceeding one-quarter of an inch in diameter; must be sharp and clean. The blocks are laid at right angles to kerb, each course being of blocks of uniform width. The joints are limited to a width of three-quarter inches. After being laid the blocks are covered with clean, hot, dry, screened

pebbles, between one-quarter and one-eighth inches in diameter, and sunken into joints until filled to one inch from top. The blocks are then rammed and the joints filled with hot paving cement, and the excess absorbed by fine dry gravel. The cost of laying these blocks, exclusive of price of blocks, was, in 1892, from $2.66 to $2.76 per square yard, making price of finished pavement from $4.56 to $4.66 per square yard.

Granite Blocks on Gravel Bed.

The gravel foundation is six inches thick, and consists of stones not larger than three-quarter inches in diameter. The joints are filled with fine, dry, gravel or coarse sand, and the entire area is finally covered with fine, dry, screened gravel to a depth of one inch. The cost of laying this pavement was, in 1892, exclusive of price of blocks, 95 cents to $1.35 per square yard, or, including blocks, from $2.85 to $3.25 per square yard.

Where tar joints were used instead of gravel, the cost of laying was from $1.12 to $1.37 per square yard, or a total cost of $3.02 to $3.27 per square yard.

The work is guaranteed for six months, exclusive of months of December, January, February, March, and five per cent. is retained for this purpose.

When the city prepares the base, the laying of the blocks with pitched joints costs 79 cents per square yard. Without tarred joints the price is 25 cents per square yard.

Asphalt Pavements.

Both Trinidad Lake and Sicilian asphalt pavements are now laid in Boston, either on six inch concrete base or on cobble or other rough stone.

The top coating consists of two and a half inches of asphalt; though it is probable in future that binder will be used. The binder used over cobble stone is mixed with coal tar distillate.

The price paid for the pavement complete upon six-inch base, including grading, averages in cost $3.93; for repaving on old base the cost was $2.25 per square yard.

In 1893 the laying of the concrete base was let to one company at uniform price of $5 per cubic yard, or about 83⅓, and the wearing surface alone was put on by the Asphalt Paving Companies at a uniform price of $2.25 per square yard, making the total cost about $3.08⅓ per square yard, exclusive of grading. The grading was done by the city authorities. All asphalt pavements are kept in repair, for five years, by the companies laying the pavements without extra cost.

Brick Pavements.

Only a few squares are laid with this class of material. The bricks were furnished by the contractors and laid on the original macadam pavement properly prepared.

The total cost, including grouting with Portland cement, was from $2.40 to $2.75 cents per square yard.

These pavements, when undisturded, have worn very well. The pavements were laid in 1891.

TELFORD MACADAM PAVEMENTS.

The Telford macadam pavements consist of a Telford base constructed by hand and a macadam surface consisting of broken stone between one and two and a-half inches in diameter, covered with screenings, between half and one-inch in diameter, binder, gravel and coarse screening put in separate layers.

All rolling must be done with fifteen ton steam rollers and the pavement kept thoroughly wet.

The telford base is 10 inches deep on heavily traveled streets and 8 deep in others. The macadam varies in depth from 8 to 6 inches.

The pavement forms a very pleasant driveway but is dusty and expensive to keep in repair.

The cost of the work is as follows:

Sub-grading twenty-five to thirty-five cents per cubic yard

Telford base sixty-five to ninety-five cents per square yard.

Macadam surface twenty-five to forty-eight cents per square yard.

The gutters are laid with granite block in gravel and cost complete $2.31 to $2.60 per square yard.

OLD MATERIALS.

Old materials removed from the streets are reserved by the city for use in making repairs or repaving other streets. This material is stored in the city's property yards.

KERB OR EDGE-STONES.

The kerb or edge-stones of Boston are superior to any seen elsewhere. They are "of Quincy, Cape Ann or other equally good granite, cut in lengths of not less than six feet, to be free from bunches and depressions, and to have horizontal beds; the ends to the entire depth to be squared with the top and so cut as to set with joints of not more than three-eighths of an inch, without mortar; the edge-stones to be out of wind. The hammered surfaces are to be full to line. The edge-stones are to be seven inches wide on top and twenty inches deep; they are to be hammered on top, fine pointed three inches down on the back, and squared with the top and fine pointed ten inches down the face; the remainder of the face is to be straight split. The face is to be cut square with the top." They are ordinarily purchased by the city and issued to the contractor. The price per linear foot, delivered, was in 1891–2 seventy-three cents per linear foot. The price for setting varied in 1894 from eight to eighteen cents per linear foot.

CROSS-WALKS.

The cross-walks are ordinarily constructed of North River flagging; the material is furnished by the city

and laid by the contractor. The cost of the material is fifty-two and half cents per square yard, and the average price for laying was in 1892 sixty-six cents per square yard; under the present contract the price for laying varied from twenty-five to fifty cents.

STREET RAILWAYS.

The street railways are ordinarily required to pave and keep in repair the space between the outer rails. As a rule the roads use a tram girder rail and pave with granite block between rails and tracks.

REPAIRS.

Repairs are ordinarily made by hired labor. The average number of men employed was reported in 1892 as 750. The total expenditures for this purpose was $556,120.49. Repairs to asphalt pavements are made by contract at $2.25 per square yard for renewing the surface.

The large expenditure for repairs is due to the large amount of macadam requiring constant attention.

STREET OPENINGS.

The report of 1892 states that 11,320 permits were issued for street excavations, aggregating in all 1,107 miles. Each party is allowed to repair his own opening, and must give a bond for this purpose; no deposit is, however, required. The result has not been satisfactory as to the street department, as the cuts are not always properly repaired.

CONTRACT.

All work, the cost of which exceeds $3,000, must be done by contract. Inspectors on contract work are paid $3.00 to $5.00 per day. A large portion of the work is, however, done by hired labor, the pay for unskilled labor being $2.00 and $2.10 per day, as fixed by law.

SCHEDULE OF STREETS TO BE PAVED.

The schedule of the streets to be paved is decided by the Mayor, with the assistance of the Street Department.

ORGANIZATION.

The Superintendent of Streets, appointed by the mayor, subject to confirmation by Board of Aldermen, has charge of construction, maintenance of streets and sewers, of the maintenance of bridges, of the cleaning of streets and removal of garbage, ashes, etc. His principal assistants appointed by him, 1, a secretary and executive engineer; 2, a purchasing agent; 3, deputy superintendent of paving division; 4, deputy superintendent of sewer division; 5, deputy superintendent of bridge division; 6, deputy superintendent of lamp division and deputy superintendent of street cleaning division. The deputy in charge of paving division has charge of the construction and maintenance of paved streets, and street sprinkling, and the issuance of permits for street openings and constructions. The construction work is divided into ten districts. Appointments in the department are subject to civil service rules.

In addition to this department there is a board of survey consisting of three persons to make plans showing the location and grades of such highways as in their opinion are necessary for the present or future interest of the city, and a board of street commissioners, also consisting of three, with power to lay out, widen and discontinue highways, subject to approval by City Council when cost exceeds $10,000, and to order specific repairs.

There is also a city engineer, who has charge of engineers' work for the different departments, except that of sewers.

BALTIMORE.

The regular appropriation for the maintenance of the roadways of Baltimore, as given in an ordinance making the appropriations for the year 1893, are as follows:

CITY COMMISSIONER'S DEPARTMENT.

1. Repairs to paved streets	$ 80,000.00
2. Paving in front of city property	1,000.00
3. Paving cross streets	5,000.00
4. Repairs to improved streets	2,000.00
5. Flag and stepping-stones	8,000.00
6. Eight small items aggregating	16,948.91
7. Salaries	9,900.00
8. Incidentals	100.00
9. Hiring of horses and repairs to wagons	800.00
Total	$123,748.91

Annex.

Repairs to roads, streets, etc	$ 28,000.00
Salaries, etc	2,432.00
Repairs to various named streets aggregating	20,400.00
	$ 50,832.00
Grand total	$174,580.91

In addition to the above additional work is authorized by special ordinances.

None of the above appropriations provide for the laying of improved pavements. For this purpose authority was obtained from the Legislature to make two loans, one of $5,000,000, approved November 7, 1888, and one of $6,000.000, approved November 9, 1892. Of the former $1,000,000, and of the latter $1,600,000 was set aside for laying improved pavements. Of these amounts there was expended to January 1, 1894, $1,638,923.60, leaving a balance of $961,076.40 unexpended.

The total expenditures under the $5,000,000 loan have been $998,803.97; the area paved 247,539 square yards; making the average cost, including change of grades, kerb, gutters, inspection and office expenses, about $4.03 per square yard.

The total expenditures under the $6,000,000 loan have been $640,119.63, and the area paved 144,857 square yards; making the average cost $4.41 per square yard.

The cost of sheet asphalt paving, including incidental expenses, has varied from $2.80 on Camden street to $4.97 per square yard upon Front street; the cost of asphalt block from $3.21 on Arlington, Lanvale and Carrollton avenues to $4.11 upon St. Paul street; the cost of granite block pavement from $2.21 upon South street to $6.91 upon Concord street.

The annual report of the City Commissioner does not itemize expenditures upon different streets, except those upon Maryland avenue. It is, therefore, impossible to state the exact reasons for the difference of cost of improving different streets.

The only appropriation provided for paving new streets is that for "paving cross streets, $5,000." This provides for the paving of intersections, the cost of the remainder of the street being assessed against the abutting property-owners. The pavement laid under this appropriation is ordinarily rubble or cobble.

AREA OF PAVED STREETS.

No accurate data could be obtained of the area of the character of the various pavements of the city.

The total mileage of streets within old limits of city is given as	700 miles.
Streets, lanes and alleys paved, including all classes of pavements	470 "
Streets paved with improved pavements	35.37 "

STREETS PAVED WITH IMPROVED PAVEMENTS.

	SQUARE YARDS.	MILES.
Granite blocks	453,884	20.91
Sheet asphalt	164,017	6.72
Asphalt block	181,743	7.39
Vitrified brick	8,572	0.25
Totals	808,216	35.37

The standard pavements adopted for Baltimore are as given in the above table.

METHOD OF LAYING.

Granite Block Pavements.

The old material being removed from the streets, if the base is found of good material, the pavement is laid

on the original bed, brought to a proper level by the addition of such sharp, clean sand as may be required. The bed is then raked and all gravel, stones, etc., removed therefrom.

The blocks are laid close upon the bed described, at right angles to the street, and in courses of uniform thickness across the street.

The intersection, if required, are paved in diagonal courses. The blocks are then covered well with clean, fine sand and thoroughly rammed.

If any portion of the pavement settles in ramming, it must be taken up and re-rammed. After ramming, a coat of good, sharp sand not less than three inches thick must be spread over the pavement, to remain until ordered to be removed by the City Commissioner.

If the ground upon which the pavement is laid is soft or spongy, it may be ordered removed to a depth of twelve inches and filled in with gravel.

SPECIFICATIONS FOR SHEET ASPHALT.

The specifications are substantially those in use in Washington, except that the binder does not seem to be everywhere used and the foundation is not always required to be rolled.

The specifications require the use of asphalt from the lake in the Island of Trinidad.

The pavement is kept in repair by the contractor for two years, and bonds are required to ensure compliance with this condition.

SPECIFICATIONS FOR ASPHALT BLOCK.

The sub-soil is to be excavated to a depth of twelve inches below the top of the pavement when fully rammed. Should there be any spongy material or vegetable matter in the bed thus prepared, the same shall be removed, and the space filled with clear gravel or sand. Care must be taken to preserve the proper crown. All holes and inequalities must be filled with sand or gravel only; such filling to be compacted by ramming or rolling.

If the present bed is found, after careful examination, to consist of good sand or gravel, which is usually the case, the excavation for the bed may be omitted, except sufficient to allow the laying of the two-inch bed of sand.

The blocks are laid upon the bed of sand to true grade and the joints filled with clean, fine sand.

The blocks are then rammed with a suitable rammer, and the pavement covered with fine, dry sand, which is spread over the surface, and spread or raked into the joints.

The pavement is kept in repair by the contractor for two years.

OLD MATERIAL.

Old kerbing, dressed flag, gutter-stones and gutter-plates are reserved by the city. Old cobble or rubble becomes the property of the contractor.

KERB STONES.

New kerb is ordinarily of 6x18 granite, in length not less than six feet. The face of kerb is dressed to a depth of fourteen inches, six inches of which from the top must be bush hammered. The top is bush hammered and the back pointed to a depth of four inches. The joints are grouted with cement. The cost of this kerb when purchased by the city is $1.00 per linear foot.

Furnished and set by the contractor on St. Paul street the cost was 93¾ cents per linear foot, and on Front street $1.24 per linear foot, and on Maryland avenue $1.15 per linear foot; as laid by the city $1.26 per linear foot. Circular kerb upon Maryland avenue cost $2.30 per linear foot in place.

Old kerb was redressed, reset upon St. Paul street at thirty cents per linear foot, upon Front street at thirty-five cents per linear foot, and upon Maryland avenue at thirty-five cents per linear foot. Old kerb redressed and reset on the latter street at sixty cents per linear foot.

FLAG STONES.

Old flag stone crossing redressed and set, St. Paul street, $1.80 per square yard; Front street, the same; on Maryland avenue, ninety cents.

GUTTERS.

On account of the surface drainage the gutters of Baltimore form a very expensive addition to the pavements. These are of three classes: 1st. Open stone gutters, con-

sisting of six inch slab granite eighteen inches wide, of a length not less than four feet, set in a base of concrete nine inches thick. The tops are cut to a radius of eight feet. The price bid on St. Paul and Front streets was $5.50 and $6.30 per linear foot. 2nd. Regulation granolithic gutters, admirably adapted for the purpose, eighteen inches wide and about one foot deep, made of Portland cement concrete. The cost is $3.00 per square yard, or fifty cents per running foot. 3rd. Special granolithic covered gutters, covered with slabs of granite. These cost $3.25 per square foot complete.

SIDEWALKS.

These are laid and maintained by and at the expense of the abutting property-owners.

STREET RAILWAYS.

There seems to be no uniform requirement as to the work done by the street railways in paving the streets. Upon some streets the railway space is paved by the city, and upon others by the railway. The annual report of the Commissioner does not indicate that the pavements between rails and tracks are always kept in satisfactory repair.

REPAIRS.

Repairs to granite block and similar pavements are made by hired labor, and purchase of material by contract. Repairs to asphalt block pavements are made by contract, the blocks costing six and a-half cents a piece, and the price of laying being forty cents per square yard; the old material belongs to the contractor.

The repairs to asphalt pavements are made by the contractor at about the prices for new work.

STREET OPENINGS.

The street department has very little, if any, control over street openings which are repaired by the party making the cut. No deposit or bond is necessary before a cut is made.

ORGANIZATION.

The City Commissioner, appointed by the Mayor, has charge of sewers, bridges and street paving. Under him are three Assistant Commissioners and one Engineer of Bridges. The assistants are assigned as follows:

1. In charge of street paving in city.
2. In charge of construction of sewers in city and supervision over street railways.
3. In charge of streets and sewers in annex.

These employees are paid fixed salaries. All the other employees of street paving division are paid from the appropriations for the street works. The paving division employs an office force of about twelve to fourteen men—assistant engineers, rodmen, chainmen, draughtsman, etc.

CONTRACT PRICES UPON STREET WORK.

	ST. PAUL ST.	FRONT ST.	
New six (6) inch kerb, set for	93¾ct.	$1.24	per lin. ft.
Old six (6) inch kerb dressed, joined and reset, for.....	30ct.	35ct.	"

	ST. PAUL ST.	FRONT ST.	
Four and one-half inch kerb set in concrete for headers for	$1.50	$1.30	per lin. ft.
New flag-stone crossing set for	.....	2.00	
Old flag-stone crossings dressed, joined and reset for	1.80	1.80	"
Special open-stone gutters set on concrete for	5.50	6.30	"
Regulation granolithic gutter for	33⅓ct.	33⅓ct.	per sq. ft.
Special granolithic covered gutters complete for	.....	$3.25	"
Hauling old four and one-half inch kerb for	08ct.	08ct.	per lin. ft.
Hauling old six inch kerb for	09ct.	08½ct.	"
Hauling gutter stones for	04½ct.	04½ct.	"
Hauling flag-stones for	08ct.	....	"
Hauling gutter stones for	....	04½ct.	"
Hauling old iron gutter plates for	....	70ct.	sq. yard.
Sheet asphalt for	....	$2.70	"
Asphalt block for	2.50	....	"

BUFFALO.

All new pavements in the city of Buffalo and all repavements are laid upon petition of the abutting property-owners, and the cost of the same assessed against the property. These assessments are collected in five annual installments.

Payment is made to the contractor in warrants, due at the same time as the installments, or out of the proceeds of bonds sold by the city for that purpose. The amount of work done in any year depends on the petitions. For the year 1893–4 the contracts amounted to $1,618,704.61, of which $1,508,312.37 is for asphalt pavement; $24,487.00 for stone, and $85,905.24 for brick.

Repairs are made by the city out of the general fund, and consist in general repairs and renewals not exceeding one-third of the area of the streets. Repairs exceeding that amount are considered equivalent to repaving, and the cost is assessed against the abutting property.

The total amount appropriated for repairs was in 1893–4, $70,000.

All the employees and miscellaneous items are paid out of separate appropriations and are not charged to the work.

AREA AND MILEAGE OF PAVED STREETS.

	SQUARE YARDS.	MILES.
Sheet asphalt	2,759,008	150.
Medina sand stone	2,112,000	120.
Vitrified brick	53,328	3.03
Macadam	17,600	1.00
	4,941,936	274.03

The general sentiment of the city, expressed by petitions, is in favor of asphalt pavement, and it is only on the heavily traveled streets that stone is now used.

There are, however, not a few persons who prefer the Medina sand stone laid upon a concrete base. Brick pavements have been laid but a short time and are still in the experimental stage. Macadam is only used in the park drives and boulevards.

METHOD OF LAYING PAVEMENTS.

Medina Sand Stone.

No granite block pavements are laid; all stone pavements are laid with Medina sand stone. While not quite so durable as granite, it is less noisy and does not become so smooth or slippery as the former.

The standard pavement consists of a six inch concrete base of Rosendale cement, mixed in the proportion of one, two and five, a cushion coat of two inches of sand, upon which the blocks are paved so that the joints shall not exceed half an inch in width. The dimensions of the blocks are: Width, three to four and three-

quarter inches; depth, six and a-half to seven inches; and length, seven to twelve inches. The surface of the stone must be smooth and rectangular. The greatest variation in width in any one row must not exceed one quarter of an inch. After being set the stones are rammed with a ninety-pound rammer, so made that no iron shall come in contact with the stone. The joints are filled with coal-tar paving cement, mixed with washed gravel, or with a mixture of Portland cement and sand, one to one, mixed dry and then thoroughly wet with water in a suitable box. The pavement is then covered to a depth of one-half inch with clean, coarse sand. Street intersections are paved herring bone fashion. The cost of the pavement is about $3.60 per square yard.

This stone is also purchased for repairing these streets, and costs about $10.00 a cord; a cord will lay from sixteen to eighteen square yards.

SHEET ASPHALT.

Nearly all sheet asphalt pavements are laid with Trinidad lake asphalt; a few have, however, been laid with German rock and American bituminous rock.

The Trinidad lake pavements are laid upon a six inch concrete base, according to the usual method, with base, binder and surface. The surface, however, is two inches thick when compressed.

The German rock asphalt pavement is laid in the same manner as the Trinidad asphalt pavement, except that in the surface mixture about 30 to 35 per cent. of

the sand is replaced by German rock asphalt mastic, or German rock asphalt.

The American bituminous rock pavements have the same base and binder as the other pavements; but the surface mixture consists of 65 to 75 per cent. of American bituminous rock, from Kentucky, and 35 to to 25 per cent. of Vorwalle (German) bituminous rock. The latter two pavements are still considered in the experimental stage.

Some Sicilian asphalt has been laid upon streets not subject to much travel.

The cost of the asphalt pavements is uniformly about $3.00 per square yard, including the setting of the kerb and grading to a depth of one foot. If the cost of the kerb is deducted the price would be about $2.76 to $2.77 per square yard. Some of the streets were paved over the old stone at a cost of from $1.75 to $2.00 per square yard.

BRICK PAVEMENTS.

The brick pavements are laid upon a six-inch concrete base prepared as described above, with a cushion of sand one inch thick. The joints are grouted with Portland cement as described for stone block paving.

The cost of this paving varies from $2.70 to $2.85 per square yard. As a rule, some form of Shale brick has been used.

MAINTENANCE AND GUARANTEE.

On expiration of guarantee for maintenance, the work is to be inspected, and all imperfections, depressions and unevenness of surface, alignment and level of kerbs, etc., on stone or brick pavement, cracks, rolls, breaking up of wearing or cushion coat or concrete base, kerb alignment and level on asphalt pavement, must be corrected where and to such an extent as the chief engineer shall direct, upon which the chief engineer will accept the same in writing, and until such acceptance the guarantee shall be in force.

The contractor shall furnish a bond to the city of Buffalo, with two sufficient sureties, who each justify in full penalty of the bond. The condition of said bond to be that the contractor will, at his own cost and expense, keep and maintain the pavement in good condition for five (5) years from the completion of said pavement. Said bond shall be approved by the Mayor and filed with the Comptroller, and amount of said bond to be equal to $33\frac{1}{3}$ per cent. of the contract.

CROSS WALKS.

These are also of Medina sand stone, one and one-half to two feet in width, not less than three and one-half feet in length and six inches thick. Joints must not exceed one-eighth of an inch to a depth of three inches. The end joints are cut to an angle of fifteen per cent. with the side joints.

SIDEWALKS.

These are laid by and at the expense of abutting property-owners.

STREET RAILWAYS.

The street railways ordinarily use the tram-girder rail. Under the old charters they are obliged to keep in repair the pavement between the outer rails, and in recent charters, in addition, two feet beyond the outer rails. They are not obliged to lay the same pavement as upon the street. As a rule the roads use the overhead trolley.

REPAIRS.

Repairs to stone pavements are made by hired labor; to asphalt, by contract. For the latter a three years guarantee is exacted. The price paid is $1.54 per square yard for renewal of surface, and $2.39 for renewal of surface and base; four cents per linear foot is paid for scraping joints between kerb and pavements; and for coating gutters twelve inches wide with pure hot asphalt and smoothing with hot smoothing irons; two cents per linear foot is paid for cleaning out cracks, paving them with pure hot asphalt and smoothing with hot smoothing irons.

The annual cost of repairs for the pavements not under guarantee is given in the following tables:

YEAR.	SQUARE YARDS NOT UNDER GUARANTEE.	AVERAGE COST PER SQ. YD. FOR REPAIRS.
1885	16,550	$.006
1887	28,445	.004
1888	53,946	.004
1889	89,761	....
1890	89,761	.024
1891	200,179	.019
1892	399,901	.093
1893	569,927	.052
Total in city	2,759,008	

STREET OPENINGS.

Parties desiring to open the roadway pavements must first obtain a permit. If it is in an asphalt pavement the party must give the contractor a bond sufficient to cover the cost of repairs by the contractor who lays asphalt pavements. If in the stone pavements the party makes the repairs himself. The latter method is not found satisfactory. No deposit is required.

CONTRACT AND HIRED LABOR.

All work is done by contract except the repairs to block streets.

DRAIN TILE.

When the adjacent unoccupied land is higher than the street it has been found advisable to put a four inch drain tile just in rear of and two feet below the top of the kerb. This tile is connected with the sewers.

SEWER AND WATER CONNECTIONS.

All sewer water and connections are put in before the pavement is laid, and the contractor is compelled, whenever called upon, to put in these connections at schedule prices fixed by the city authorities. This fixes the responsibility for any settling of the trenches upon the contractor.

Some of the general features of all specifications are as follows:

All kerb, cross walk and other cut stone used in paving the street must be cut within the city limits. The contractor is prohibited from employing non-residents of the city of Buffalo in the execution of his contract.

No teams are to be employed in city work except those owned by citizens of the city of Buffalo. The contractor shall not discriminate either as to workmen or wages against members of labor organizations, or accept more than eight hours as a day's work to be performed within nine consecutive hours, except in cases of necessity, in which case pay shall be at the rate of time and one-half for all time in excess of each eight hours.

OLD MATERIALS.

The old material, if any in the street, becomes the property of the contractor, and may be used, if proper, for the purpose.

KERB STONES.

The kerb is of Medina sand stone, ordinarily four inches by eighteen inches, and not less than two and a-half feet long. This kerb costs about forty cents a foot in place. Recently a six inch kerb set in concrete has been introduced.

SELECTION OF STREETS TO BE PAVED.

The character of the pavement and the street to be paved is ordinarily fixed by the petition of the abutting property-owners, though the Board of Public Works occasionally decides the former. When public safety or convenience requires it, a pavement may be ordered by the Board of Public Works.

ORGANIZATION.

The public works are under the charge of a board consisting of three members; one is elected by popular vote, and the other two are appointed by the Mayor from different political parties. One member retires each year.

Under the Board are the following bureaus:

1. Bureau of Chief Engineer, which has charge of sewers, location, grading and paving of streets, alleys and roads, docks and bulkheads, bridges and surveys, estimates and drawings.

2. Bureau of Buildings.

3. Bureau of Water.

4. Bureau of Streets—having charge of cleaning, sweeping and sprinkling streets and alleys, removal of garbage and ashes, street obstructions, cleaning and inspecting sewers, and charge of street lighting.

The appointments under the Board of Public Works are made by the Board, and, except the heads of bureaus, are subject to civil service rules. The Civil Service Commissioners serve without pay.

DISTRICT OF COLUMBIA.

APPROPRIATION.

The appropriations providing for the extension and maintenance of the roadways of the District of Columbia are as follows—(Extract from appropriations for fiscal year 1894).

1. For work on sundry streets and avenues..	$200,000
This appropriation provides for the paving or otherwise improving the streets in the cities of Washington and Georgetown.	
2. Construction of county roads.....	39,000
This appropriation provides for the grading, paving or otherwise improving the streets and roads in the District of Columbia, outside the cities of Washington and Georgetown.	
3. Grading streets, alleys and roads.....	2,000
This appropriation provides for the hire of carts and wagons used by the chain gang in grading.	
4. Improvements or repair of alleys and sidewalks.....	120,000
5. Repairs to Concrete pavements, (Sheet asphalt, coal-tar concrete and asphalt block).....	150,000
6. Repairs to streets, avenues and alleys....	40,000
7. Repairs to county roads.....	40,000
Total.....	$591,000

The paving of the streets of the cities of Washington and Georgetown was first undertaken upon an extensive scale under the Board of Public Works, between 1871 and 1874. The pavements laid were wood, coal-tar and asphalt concretes, cobble and trap-rock. Of wood there were laid 1,188,000 square yards, at a cost of $4,000,000. This pavement was of very defective character, soon decayed and has since been entirely replaced.

Coal-tar concretes were laid between 1871 and 1878, the total amount being 745,305 square yards at a total cost of about $2,300,000.

These pavements were laid under various patents, and differed very much in their wearing qualities. Most of them have since been resurfaced or replaced with asphalt pavements. The trap-rock and cobble pavements were rough and uncleanly, and have been gradually replaced. The period from 1874 to 1878, under the first Board of Commissioners, was mainly spent in repairing and replacing the defective pavements previously laid.

The present form of government dates from 1878 The standard pavements adopted at that time were Trinidad sheet asphalt pavement upon six-inch concrete base, and granite, with graveled and tarred joints, upon a gravel base.

The Trinidad asphalt was adopted as a result of an experiment made upon Pennsylvania avenue in 1876. A commission appointed by the President, consisting of the Architect of the Capitol, Mr. Clark, and Generals Wright and Gilmore, Corps of Engineers, U. S. Army, selected rock asphalt and Trinidad asphalt for paving

this avenue. The former was used from First to Sixth street, and the latter from Sixth to Fifteenth street. The latter having given the better satisfaction was afterwards adopted as the standard. Asphalt block was introduced at a later date and laid as an experiment.

From 1878 to 1886 there were laid of these pavements:

Asphalt upon 6-inch concrete base, 622,394 sq. yds.
Granite block..... 240,330 "
Asphalt block..... 65,916 "

The Act making appropriations for the fiscal year 1887 stated "that not more than $2.00 per square yard should be paid for concrete pavement." The contractors having been receiving $2.25 for asphalt pavement upon 6-inch concrete base, refused to decrease their price and the following pavements were introduced.

1. *Coal Tar Distillate Pavement.*

Consisting of a base of four inches of broken stone covered with coal tar, one and a-half of coal-tar binder, and a wearing surface made with a paving cement consisting of 25 per cent. of asphalt and 75 per cent. of coal, tar distillate.

2. *Sheet Asphalt Upon Bituminous Base.*

The base and binder were the same as for coal-tar distillate pavement; the wearing surface consisted of one and a-half inches of asphalt.

3. *Sheet Asphalt Upon a Four-Inch Concrete Base.*

The latter originally consisted of four inches of concrete base and two and a-half inches of asphalt surface, but since 1892 the wearing surface has been replaced by one and a-half inches of binder and one and a-half inches of asphalt.

Since 1892 only asphalt cement has been used in the binder mixture.

Of the coal-tar distillate there was laid from 1887 to 1890, 141,580 square yards, all of which must be considered of a defective character, and will require replacing in a few years.

The asphalt upon bituminous base was found to be superior to the coal tar distillate, but the base was not sufficiently rigid to retain the shape of the cross section; upon moist ground it was also found to disintegrate rapidly.

The sheet asphalt upon a four-inch base was found suitable to streets of light travel, when the ground was solid, but the depth is considered too light for ordinary travel.

The restrictions as to price having been modified in 1892 so as to allow the payment of $2.25 per square yard upon all streets subjected to heavy travel, the six-inch base is now laid upon such streets and the four-inch base upon the others. The coal tar distillate was abandoned in 1890, and the bituminous base in 1892.

Since 1878 the cost of roadway pavements are paid out of the general fund, and no part is assessed against the abutting property. Since 1892 one-half of the cost of kerbs and sidewalks are assessed against the abutting property. All repairs are paid for out of the general fund.

In view of the fact that the United States owns about one-half of the property in the District of Columbia, it also bears one-half the expense of the District Government, including street improvements.

PAVEMENTS OF STREETS AND ALLEYS, D. C., JULY 1, 1893, CITIES OF WASHINGTON AND GEORGETOWN.

STREETS.

	MILES.	SQUARE YARDS.
Sheet asphalt	64.25	1,581,982
Coal-tar concrete	23.99	540,461
Asphalt block	12.14	279,894
Granite and Trap rock	26.09	562,116
Cobble and rubble	13.94	308,590
Macadam	36.95	383,056
Vitrified brick	0.20	3,921
Total	177.56	3,560,020

ALLEYS.

	SQUARE YARDS.
Sheet asphalt	8,542
Asphalt block	97,989
Granite	2,170
Vitrified brick	114,711
Cobble	352,084
Ordinary brick	2,250
Total	577,746

COUNTY OF WASHINGTON.

STREETS.

	MILES.	SQUARE YARDS.
Sheet asphalt	8.43	158,545
Granite	2.42	23,241
Asphalt block	.06	966
Macadam	24.00	240,944
Total	34.91	423,696

METHOD OF LAYING PAVEMENTS.

All new work upon streets is done by contract, and all new pavements are guaranteed and kept in repair by the contractor for a period of five years. Ten per cent. is retained from the payments upon contracts for the period of five years. These amounts are invested for the benefit of the contractor in accordance with his wishes, and he is annually paid the interest upon his investments. A bond is also required covering the entire estimated cost of the new pavements.

GRANITE BLOCK PAVEMENTS.

Granite block pavements are laid upon four-inch concrete base, and upon four-inch rolled gravel. In each case the joints are filled with gravel and pitch. The contractor is required to furnish three and one-half gallons of pitch for each square yard of pavement, and whatever is not used becomes the property of the District. The blocks are purchased under a separate contract, inspected and stored in property yards until required. The blocks run forty-two to the yard and cost

from $45.00 to $52.00 per thousand. The cost of laying upon gravel base has varied between seventy-five and ninety-five cents per square yard, and upon four-inch concrete base from $1.38 to $1.40 per square yard. During the last two years, when the contractor was required to observe the eight hour law, the prices for these pavements have averaged as follows:

Upon four-inch concrete base, including grading.....$3.60 per sq. yd.
Upon gravel base..... 3.14 "

SHEET ASPHALT PAVEMENTS.

The standard sheet asphalt pavements are laid substantially as described for New York pavements, and consist of a base of six inches of concrete, one and one-half inches of asphalt binder, and one and one-half inches of asphalt surface, thoroughly compressed. Prior to 1887, the wearing surface consisted of two and one-half inches of asphalt, without a binder. The lowest price ever paid for this pavement was $1.47 per square yard in 1879. The price was gradually increased until 1882, when it became $2.25 per square yard, at which price it remained until the present year. During the present year Trinidad lake asphalt is being laid for $2.18½ and Bermudez for $2.10 per square yard. The grading increases this price about 15 to 20 cents per square yard. The price for similar pavement upon four-inch base has been $2.00 per square yard, or $2.15 to $2.20 with grading, and the same price was paid for the four-inch bituminous base. During the present year the price for four-inch concrete

base is $1.93½ for Trinidad lake, and $1.90 for Bermudez. A pavement was laid upon a cobble base at a cost of $1.74½ in 1893, of Trinidad asphalt, and during the present year one of Bermudez asphalt for $1.54 per square yard.

ASPHALT BLOCK PAVEMENTS.

Asphalt block pavements are laid upon a base of five inches of rolled gravel with two inches of sand for $2.00 per square yard. The grading increases this cost about thirty cents per square yard.

The asphalt block, up to the current year, was manufactured in Hastings, New York; Camden, New Jersey, and Baltimore, Maryland. They are now being manufactured in Washington, D. C. They are delivered upon the streets at $64.50 per M., or about $1.65 per square yard. In the paving of alleys, which is done by day labor, it is found that this pavement can be laid upon a four-inch bed of gravel, with sand cushion, including removal of old material and necessary grading for $2.10 per square yard, the blocks being purchased by contract at $64.50 per M.

VITRIFIED BRICK.

Vitrified brick street pavement has not passed the experimental stage in Washington. Upon one or two streets in the city there are short stretches of fire-clay brick pavment laid by the Superintendent of Streets upon a six-inch concrete base, and during the current year a portion of one street was paved by contract with the same material. The bricks were purchased from

the Canton Shale Brick Exchange for $17,83 per thousand, and laid upon a four-inch concrete base, with two inches of sand, for $0.95 per square yard; the total cost being about $2.25 per square yard, including grading.

ALLEY PAVEMENTS.

The alley pavements aggregate about 577,746 square yards, over half of which are at present cobble. Those now being paved are paved either with granite, asphalt block or vitrified brick. The granite block are laid in the same manner as the street pavement, the asphalt block upon a four-inch base of gravel, tamped but not rolled, and the vitrified brick upon a similar base with joints filled with grouting of natural cement. The materials are purchased by contract and the work done by hired labor. The asphalt blocks cost about $1.65 per yard, delivered upon the work, and the finished pavement about $2.10 per square yard, including all grading, removing old materials, etc. The vitrified brick cost about $1.20 per yard, delivered on the work, and the finished pavement about $1.75 per square yard.

SIDEWALKS.

One-half of the cost of all sidewalks is borne by the general appropriation and one-half by the abutting property owner. The work is done by the district authorities either by contract entirely or by the purchase of materials by contract and the work by hired labor. Brick sidewalks upon a four-inch base of gravel, covered with two inches of washed sand, cost about seventy cents per square yard; asphalt tile walks, on similar base, $1.50 per square yard, and granolithic walks, five inches thick from $1.58 to $1.75 per square yard.

The alley and sidewalk pavements are laid under what is known as the "regular permit" and the "compulsory" systems. In the former case the property owner can secure the improvement by depositing in advance one-half the estimated cost thereof with the collector of taxes. When the work is completed the balance, if any, is repaid to him upon the certificate of the officer in charge of the Surface department. In the latter case, if complaint is made that the pavement of an alley is necessary for public health, the complaint is referred to the health officer, and upon his certificate such is the case, the work is, after due notice to the property owners, ordered by the commissioners, and when completed, one-half the cost is assessed against the abutting property.

The assessments are to be paid, one-third in sixty days, one-third in one year, and one-third in two years. After the sixty days, interest at ten per cent. is added thereto.

Alley pavements are, as a rule, laid under the compulsory permit system, upon a certificate of the health officer that the paving of the alley is necessary for public health, and one-half the cost is assessed against the abutting property owners.

BRIDGE STONES.

Bridge stones are not used on paved streets.

KERB.

The kerb now used is of two kinds; 6x20 granite kerb, costing $1.18 per linear foot in place; and 8x8 granite

kerb set on a six-inch concrete base, costing $1.25 per linear foot in place.

The corners are turned with circular kerb, usually of six feet radius, costing $1.60 per linear foot in place.

OLD MATERIALS.

The old materials removed from the street are hauled by the contractor to the city property yards, and are used for making repairs, or broken up for use in mixing concrete for repairs to plumber cuts.

STREET RAILWAYS.

All street railways are required to bear the expense of paving and keeping in repair all pavements between their tracks and rails and for a distance of two feet on either side. Cobble and Belgian blocks are still allowed upon railroads between the rails and tracks. The space adjacent to the track is ordinarily paved by the District authorities, and the bills for the same sent to the railroad companies for payment. If the bills are not paid, the Commissioners are authorized to issue certificates of indebtedness against the railway companies for the same.

By law all railroads are required to use only a grooved girder rail in the cities of Washington and Georgetown.

REPAIRS.

All repairs to asphalt pavements are made by contract; the present contract is with the Cranford Paving Company, which uses Trinidad lake asphalt. Ordinary re-

pairs are paid for by the cubic yard of material used at the following prices: Asphalt surface, $17.50 per cubic yard; binder, $7.20 per cubic yard; bituminous base, $3 per cubic yard, and hydraulic cement concrete, $5 per cubic yard. These repairs are guaranteed for one year. When the surface is very much worn the old surface is removed and a new one laid in its place. The cost of removing an asphalt surface and relaying with new binder and surface is $1.54 per square yard. The pavement is then guaranteed for another five years. The total area of smooth pavements is about 2,500,000 square yards, and the annual appropriation for renewal and repairs being $150,000, shows the cost of maintenance to be about six cents per square yard. The cost of maintaining individual streets has necessarily been very much greater than this.

The average annual cost of maintaining the pavement upon Pennsylvania avenue since first laid, 1876–77, has been thirteen cents per square yard. This includes its resurfacing in 1890.

Fourteenth street, N. W., laid in 1879, east side from H street to Florida avenue, has cost the same, and H street, N. E., laid in 1883, from First to Fifteenth streets, north side, has cost fifteen cents per square yard, including resurfacing. This is probably the most expensive asphalt pavement in the city.

CUTS IN PAVEMENTS.

Plumbers and others desiring to make cuts in pavements must first secure a permit for the same. A record of these cuts is sent to the Superintendent of Streets,

under whose supervision all cuts are repaired, and the cost of the same charged against the plumber, at the following schedule of prices:

Cuts in asphalt pavements	$3.00	per sq. yard.
" granite block pavements	1.35	"
" asphalt block pavements	1.35	"
" vitrified brick pavements	1.35	"
" cobble pavements	0.45	"

To insure having sufficient money on hand to cover the cost of repairs, each plumber is required to deposit with the Collector of Taxes the sum of $50, which deposit must be increased to its original amount whenever the cost charged against it amounts to $35. In addition, each licensed plumber is bonded to the amount of $500. The Gas Company has a standing deposit which is increased upon demand.

Cuts made by the Sewer and Water Departments are charged against those departments.

CONTRACT AND HIRED LABOR.

All new work and the repairs to concrete pavements are done by contract. One inspector, at $4.00 per day, is placed in charge of each piece of work to see that the specifications are complied with.

Repairs to streets and roads, the pavement of alleys and sidewalks is done by hired labor, with materials purchased by contract. The ordinary pay for day laborers is $1.50 for a day of eight hours.

The materials are received at the District property yards and there inspected before acceptance. The pay of inspectors of materials is from $2.50 to $4.00 per day.

SELECTION OF STREETS TO BE PAVED.

The schedule of streets to be improved is prepared by the officer in charge of the Surface Department, and submitted by the Commissioners to Congress. The schedule is ordinarily approved, though sometimes changes are made by the Commissioners or by the Committees of Congress.

ORGANIZATION.

All work relating to highway improvement, the construction and repair of bridges, the sub-division of lands, supervision of street railways, sewers, water supply and street lighting, are under the Engineer Commissioner of the District of Columbia. The work is divided between two assistants, one of whom has charge of the underground and the other the surface work.

The maintenance of the roadways, bridges, etc., is under the officer in charge of the Surface Department. The various bureaus under this department are under:

1. The Computing Engineer, who has charge of all new work, establishment of grades, measurements, etc. He has ordinarily three field parties, consisting of one assistant engineer, one rodman and one chainman to lay out the work.

2. Superintendent of Streets, who has charge of all repairs to paved streets.

3. Superintendent of County Roads, who has charge of all repairs to roads outside of Washington and Georgetown.

4. Engineer in charge of Bridges.

5. Engineer in charge of Sub-division of Lands.

6. Superintendent of Property.

7. Inspector of Asphalt and Cements.

The two latter have charge of, care and inspection of property and materials for both Surface and Sub-surface departments.

Some of these employees are regularly provided for in the annual appropriation bill, while others are paid out of the appropriation for the work. All appointments under the Engineer Commissioner are made by the Commissioners upon his recommendation.

The annual appropriation for work under the Engineer Department for 1894 was about $1,200,000; and the appropriation for regular employes about $65,000.

—*Proposal for laying sheet asphalt block pavements opened April* 12, 1893.

	The Barber Asphalt Paving Company.*	T. H. Thomas.*	The Cranford Paving Company.	The Washington Asphalt Block and Tile Company.*
	Price.	*Price.*	*Price.*	*Price.*
Removing old kerb, per linear foot	$0.07	$0.07	$0.08	$0.06
Removing old rubble, cobble, etc., per square yard	.13	.13	.15	.15
Grading, haul not to exceed 2,500 feet per cubic yard	.35	.35	.54	.35
Grading, macadam surface, haul not to exceed 2,500 feet, per cubic yard	.60	.60	.80	.50
Haul per 500 feet, over 2,500 feet, per cubic yard	.03	.01¼	.04	.05
Setting standard kerb, per linear foot	.16	.17	.18	.18
Resetting kerb on new line, per linear foot	.10	.10½	.14	.12
Straightening kerb, "	.08	.10	.08	.06
Setting special granite kerb, "	.36	.35	.40	.40
Combination kerb and gutter without conduit, per square yard	1 25	1.15	1.15	.....
Laying brick sidewalks, per square yard	.25	.27	.30	.25
Relaying brick sidewalks "	.30	.30	.33	.30
Laying asphalt block roadway, gravel base per square yard	.....	.....	.....	2.00
Laying asphalt block roadway, concrete base, per square yard	.....	.....	.....	2.25

Laying standard asphalt pavement, 6-inch hydraulic base, per square yard	2.18½	2.10	2.25	.....
Laying standard asphalt pavement, 4-inch hydraulic base, per square yard	1.93½	1.90	2.00	.....
Laying standard asphalt pavement on cobble, rubble, etc., base—				
Asphalt surface.....per square yard.	1.20	1.10	1.20	.....
Asphalt binder.....per cubic yard.	7.00	6.50	7.20	.....
Laying brick gutters, cement joint, per square yard	1.18	1.30	1.27	.....
Laying vitrified bricks adjacent to railroad tracks, per square yard	1.40	1.30	1.55	.....

*Bid accepted.

Schedule of proposals for improvement of streets opened April 12, 1893.

F STREET, BETWEEN VIRGINIA AVENUE AND TWENTY-FIFTH STREET, N. W.

VITRIFIED BRICK.

	Quanity.	D. P. Mullin.		J. W. Coburn.*		Hussey & McLaughlin.	
		Price.	Cost.	Price.	Cost.	Price.	Cost.
Removing old kerb per linear foot	.....	$0 07	.....	$0 09	.....	$0 10	.....
Removing old rubble, cobble, etc., per square yard	.....	12	.....	10	.....	15	.....
Grading and haul, not to exceed 2,500 feet, per cubic yard	3,000	41	$1,230 00	33	$990 00	35	$1,050 00
Grading and haul macadam, not to exceed 2,500 feet, per cubic yard	....	56	.....	40	.....	54	.....
Haul per 500 feet, over 2,500 feet, per cubic yard	1,000	04½	270 00	01	60 00	04	240 00
Setting standard kerb, per linear foot	1,500	18	270 00	24	360 00	35	525 00

Resetting granite kerb, per linear foot	.....	14	.....	14	.....	06	.....
Straightening kerb, per linear foot	.....	08	.....	13	.....	06	.....
Laying brick sidewalks, per square yard	.....	29	.....	25	.....	25	.....
Relaying brick sidewalks, per square yard	.....	31	.....	25	.....	22	.....
Laying vitrified brick pavement on 6-inch concrete base, per square yard	3,500	1 29	.....	1 10	.....	1 55	.....
Laying vitrified brick pavement on 4-inch concrete base, per square yard	3,500	1 05	3,675 00	95	3,325 00	1 30	4,550 00
Laying vitrified brick pavement on gravel base, per square yard	3,500	.....	.....	65	.....	1 05	.....
Total	.....	.....	$5,445 00	.....	$4,735 00	.....	$6,365 00

* Bid Accepted.

Canal Street, Between B and C Streets, Southwest.

GRANITE BLOCK.

	Quantity.	Hussey and McLaughlin.*		W. E. Chaffee.		George Killeen.	
		Price.	Cost.	Price.	Cost.	Price.	Cost.
Removing old curb per linear foot	.....	$0.06	.....	$0.06	.....	$0.21	.....
Removing old rubble, cobble, etc., per square yard	578	.10	$57.80	.12	$69.36	.21	$121.38
Grading and haul, not to exceed 2,500 feet per cubic yard	800	.30	240.00	.37	296.00	.24	192.00
Grading macadam, and haul, not to exceed 2,500 feet per cubic yard	.....	.35	.....	.55	.....	.35	.....
Haul per 500 feet over 2,500 feet per cubic yard	1,000	.02	32.00	.03	48.00	.02	32.00
Setting standard curb, per linear foot	655	.20	131.00	.25	163.75	.24	157.20
Resetting curb, per linear foot	655	.10	65.50	.14	91.70	.24	157.20
Straighten curb, per linear foot	.....	.05	.....	.05	.....	.15	.....

Laying brick sidewalks, per square yard	.....	.23	.....	.27	.....	.24	.....
Relaying brick sidewalks, per square yard	.....	.18	.....	.26	.....	.24	.....
Laying granite block pavement, on 6-inch concrete base, per square yard	.....	1.65	.....	1.63	.....	1.75	.....
Laying granite block pavement, on 4-inch concrete base, per square yard	2,900	1.46	4,234.00	1.44	4,176.00	1.60	4,640.00
Laying granite block pavement, on gravel base	.....	.96	.....	.92	.....	.99	.....
Total bid	.....	.....	$4,760.30	.....	$4,844.81	.....	$5,299.78

*Bid Accepted.

COMPARATIVE COST OF TRINIDAD LAKE ASPHALT PAVEMENTS, INCLUDING GRADING.

City.	Upon six inch concrete base. Square Yard.	Upon four inch concrete base. Square Yard.	Upon old macadam base. Square Yard.	Uponold cobble base. Square Yards.	Period of guarantee repairs.
New York.	$3.08 to $3.19	.....	$3.00	.....	5 yrs
Phila.....	2.60	$2.65	2.65	.....	5 yrs
Boston....	3.25 to 3.60	.....	.....	$2.25	5 yrs
Buffalo....	2.76	.....	.....	$1.76 to $2.00	5 yrs
Baltimore.	2.70	.....	.....	.....	2 yrs
Wash.....	2.38½	2.13½	1.73	1.75	5 yrs

Fifteen year guarantee in New York increases the cost from seventy cents to $2.00 per square yard; average about $1.30.

In Philadelphia and Baltimore the cobble and rubble upon streets being repaved becomes the property of the contractor, and is ordinarily used for the concrete base. In Washington this material is reserved by the city, and hauled to the city property yard by the contractor at thirteen cents per square yard.

Grading on all streets, to a depth of one foot is assumed.

COST PER SQUARE YARD OF STONE BLOCK PAVEMENT, INCLUDING GRADING.

City.	Granite upon 6 inch concrete base, pitched joint.	Granite upon 4 inch concrete base, pitched joints.	Granite upon gravel base, pitched joints.	Granite upon gravel base, sand joints.	Medina stone, concrete base, pitched joints.	Period of guarantee and repairs.
New York	$3.41 to $4.20	....	....	$2.50	....	6 months.
Philadelphia	3.85 to 4.00	$3.65	....	2.75	....	3 & 5 yrs.
Boston	4.56 to 4.66	....	$3.02 to $3.27	3.05	....	6 months.
Buffalo	....	....	....	....	$3.60	5 years.
Baltimore	....	....	....	2.75	....	none.
Washington	3.80	3.60	3.14	....	....	5 years.

COMPARATIVE COST OF ASPHALT BLOCK AND BRICK PAVEMENTS, INCLUDING GRADING.

City.	Asphalt block on gravel base, Square yard.	Brick on six inch concrete base, cemented joints.	Brick on four inch concrete base, cemented joints.	Brick on sand base, sand joints.	Period of guarantee repairs.
Phila..	.....	.....	$2.25	$2.10	3 & 5 yrs
Boston	$2.85	.....	.....	2.40 to 2.75	6 mo
Buffalo	.....	.....	2.70 to 2.85	.....	5 yrs
Balto..	2.50[1]	$2.70	.....	1.90	2 yrs
Wash..	2.20[2]	2.40	2.25	1.95	5 yrs

1. The street is ordinarily graded to a depth of about seven inches so as to allow a cushion of sand about two inches thick under the blocks. Old material, such as cobble or rubble, becomes the property of the contractor.

2. The grading is to a depth of twelve inches; the pavement is laid upon a bed consisting of five inches of rolled bank gravel and two inches of sand. Old cobble is hauled by the contractor to the district yard, and fifteen cents a square yard is paid for the haul.

RELATIVE AREAS OF DIFFERENT PAVEMENTS.

	New York. Per cent.	Philadelphia. Per cent.	Boston. Per cent.	Buffalo. Per cent.	Washington. Per cent.	Baltimore. Per cent.
Granite and trap...	81.6	19.5	29.5	....	14.7	4.5
Cobble and rubble..	0.3	56.4	0.7	....	7.7	92.5?
Sheet asphalt or tar.	8.9	6.8	1.5	55.8	57.3	1.4
Asphalt block.....	. ..	1.7	0.2	...	7.0	1.5
Vitrified brick	....	5.8	0.1	1.1	0.1	0.1
Macadam	9.2	9.8	68.0	0.4	13.2	....?
Medina sand stone..	....	....	....	42.7	....	....?
TOTAL...	100.0	100.0	100.0	100.0	100.0	100.0

PRICES PAID BY CONTRACTOR PER DAY FOR LABOR, Etc., IN DIFFERENT CITIES.

	Unskilled labor.	Paver.	Foreman.	Cart & Driver	Two Horse Wagon and Driver.	No of hours in day.
New York...	$1.50 to $1.75	$4.50	$2.50 to $3.00 Paving foreman $5 00	$3.00 to $3.50	$4.50 to $5.00	10
Philadelphia	$1.25 to $1.75	$2.50 to $4.50	$2.50 to $3.00	$2.50 to $3.50	$4.50 to $6.00	10
Boston.....	$1.50 to $2.00	$4.00	$2.50 to $4.00	$3.00	$5.00	10
Buffalo.....	$1.00 to $1.50	$2.75	$2.00 to $2.50	$2.25	$3.50 to $4.00	8 city, 10 elsewhere.
Baltimore...	$1.00 to $1.25	$4.50 for 9 hrs	$3.00	$2.00	$3.00	10
Washington.	$1.00 to $1.25	$3.00	$3.00 to $4.00	$1.60 to $1.70	$3.20 to $3.50	8 city, 10 elsewhere.

PRICES PAID PER DAY FOR LABOR, ETC., BY CITIES.

	Unskilled labor.	Paver.	Foreman.	Inspector.	Cart and driver.	Two-horse wagon and driver.	No. of hours in day.
New York.....	$2 00	$4 00	$3 00	$3 00 to 3 50	$3 00	$5 00	8
Philadelphia...	1 50 to 1 75	.....	2 50 to 3 00	75 00 per month	3 00	.....	10
Boston.....	2 00 to 2 10	3 00	3 00 to 3 75	3 00 to 5 00	3 00	6 00	9
Buffalo.....	1 50	2 75	3 00	2 50 to 3 00	3 00	4 00	8
Baltimore.....	1 66⅔	4 50	4 00	4 00	2 40	4 00	9
Washington....	1 50	3 00 to 3 25	3 50 to 4 00	4 00	1 75	3 50	8

REGISTER

— OF THE —

Corporation Officers

— OF —

BALTIMORE CITY,

FOR THE YEAR 1894.

REGISTER

— OF THE —

Corporation Officers of Baltimore City,

FOR THE YEAR 1894.

Mayor's Office.

FERDINAND C. LATROBE, *Mayor.*
WILLIAM H. LOVE, *Secretary to the Mayor.*
OTIS C. BROWNLEY, *Clerk to the Mayor.*
JOSEPH W. WHITEFORD, *City Messenger.*

Register's Office.

JOHN A. ROBB, *Register.*
J. SEWELL THOMAS, *Deputy Register.*
CHARLES M. GORDON, *Chief Clerk.*
HENRY DUVALL, JR., *Assistant Clerk.*
ROBERT D. CARTER, "
WILLIAM E. DAVIS, "

Comptroller's Office.

JAMES R. HORNER, *Comptroller.*
JOSEPH VANSANT, *Deputy Comptroller.*
J. HARRY DUVALL, *Chief Clerk.*
RIGGIN B. HORNER, *Assistant Clerk.*
JAMES T. DORSEY, *License Detective.*

Law Department.

THOMAS G. HAYES, *City Counselor.*
WM. SHEPARD BRYAN, JR., *City Solicitor.*
JAMES W. McELROY, *Examiner of Titles.*
JAMES P. GORTER, *City Attorney.*

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JAMES W. McELROY, *Examiner of Titles.*
JAMES P. GORTER, *City Attorney.*

Members of First Branch City Council.

HENRY SEIM, *President.*

First Ward.....John F. Langhammer.
Second Ward.....John Heineman.
Third Ward.....John H. Windfelder.
Fourth Ward.....Michael E. Brennan.
Fifth Ward.....Walter H. Stewart.
Sixth Ward.....John Weber.
Seventh Ward.....Eldridge Packam, Jr.
Eighth Ward.....John F. Doyle.
Ninth Ward.....John F. Leonard.
Tenth Ward.....Henry Seim.
Eleventh Ward.....James Doyle.
Twelfth Ward.....Bernard Depkin.
Thirteenth Ward.....John M. Jones.
Fourteenth Ward.....William J. Robertson.
Fifteenth Ward.....Joseph H. Smith.
Sixteenth Ward.....James E. McClellan.
Seventeenth Ward.....John E. Durding.
Eighteenth Ward.....Henry Hellbach.
Nineteenth Ward.....William J. Ogden.
Twentieth Ward.....Martin B. Brown.
Twenty-first Ward.....Charles H. S. Brannan.
Twenty-second Ward.....Alcaeus Hooper.

John Kelly, *Chief Clerk.*
Alexander M. Briscoe, *Assistant Clerk.*
Millard F. Taylor, *Committee Clerk.*
Charles H. Collins, *Sergeant-at-Arms.*
P. F. Doyle, John T. Murphy, } *Doorkeepers.*
Jesse F. Hall, *Page.*

Members of Second Branch City Council.

JAMES H. SMITH, *President.*

First and Second Wards.....Hanson P. Barnes.
Third and Fourth Wards.....Adam Deupert.
Fifth and Sixth Wards.....Lawrence Rigger.
Seventh and Eighth Wards.....Terrence McMahon.
Ninth and Tenth Wards.....Patrick Rodgers.
Eleventh and Twelfth Wards.....John R. Kelso.
Thirteenth and Fourteenth Wards.John T. Fahey.
Fifteenth and Sixteenth Wards..Daniel E. Clark.
Seventeenth & Eighteenth Wards.Frederick Spindler.
Nineteenth and Twentieth Wards.Walter B. Swindell.
Twenty-first and Twenty-second Wards..... } James H. Smith.

John M. Travers, *Chief Clerk.*
John B. Keplinger, *Assistant Clerk.*
James J. Flannery, *Committee Clerk.*
Michael Farrell, *Sergeant-at-Arms.*
Joseph H. Krager, *Doorkeeper.*
Harry C. Butts, *Page.*

Department of Finance.

His Honor Ferdinand C. Latrobe, *Chairman.*
James Sloan, Jr., John B. Ramsay.

Tax Department.

Lewis N. Hopkins, *City Collector.*
J. T. M. Barnes, *Deputy City Collector.*
Clapham Murray, *Cashier.*
Herbert Snowden, *Assistant Cashier.*
Charles Schwartzhaupt, *Bookkeeper.*

Tax Department—Continued.

W. C. Bordley, *General Cash Bookkeeper.*
Frank J. Murphy, *Transfer Clerk.*
M. P. Caughey, *Ledger Clerk.*
James K. Harwood, "
J. F. Cook, "
Gover Kettlewell, "
F. H. Fairbank, "
Claude L. Goodwin, "
John M. Pope, "
Frank C. Plunkett, "
W. W. Sinclair, "
John T. Murphy, "
Joseph Lutz, "
Ridgley Duvall, *Bookkeeper for Annex.*
Ambrose M. Emory, *Ledger Clerk for Annex.*
Samuel W. Storm, " " "
John J. Potter, *Bailiff.*
Charles Kilian, "
John J. Rock, "
George N. Hughes, "
Richard F. Curtis, "
Patrick Scanlon, "
William J. Laughlin, "
Henry Laufer, "
James T. Buckley, "
Robert J. Padgett, Jr., "
William Linthicum, "
Louis Griesman, "
John T. Nolan, "
Patrick Scanlon, "
Michael Downs, "
William J. McCleary, "

Tax Department—Concluded.

Charles S. Moran, *Bailiff.*
George P. Hamlin, "
Francis Cutaiar, "
Samuel A. Clagett, "
Joseph P. Scott, "
Joseph J. Peters, "
R. J. McCuen, "
Robert R. Kirkland, "
Charles E. Key, "
Joseph R. Knight, "
Philip Wolf, "
Aaron Goodman, "
Thomas F. McNulty, "

Judges of Appeal Tax Court.

Wm. H. B. Fusselbaugh, E. J. Chaisty, Jr., Eugene T. Joyce.

Thos. K. McCormick, *Chief Clerk.*
Michael H. Doyle, *Assistant Clerk.*
Wm. J. King, *Chief Assessor.*
Joshua D. Taylor, *Assessor.*
Elias Rosenbaum, "
Dr. Geo. W. Massamore, "
F. G. Maxwell, "
Geo. T. Fowler, "
Francis X. Jenkins, *Clerk to Assessors.*

City Commissioner's Department.

Alfred E. Smyrk, *City Commissioner.*
Charles P. Kahler, *Assistant City Commissioner.*
A. Leslie Duvall, " " "
Charles A. Hook, " " "
John E. Toole, *Clerk.*

City Library.

George C. Wedderburn, *Librarian.*
Samuel S. Ely, *Assistant Librarian.*

Inspector of Public Buildings' Office.

J. Theodore Oster, *Inspector.*
William Q. Caldwell, *Assistant Inspector.*
William B. Wood, *Clerk.*

Commissioners for Opening Streets.

James R. Brewer,
Louis Beck,
Sherlock Swann.
Robert F. Green, *Clerk.*

Health Department.

Commissioner of Health and Registrar.
James F. McShane, M.D.

Assistant Health Commissioner.
Hiram L. Spicer, M.D.

Resident Physician Quarantine Hospital, Port of Baltimore.
Sidney O. Heiskell, M.D.

Secretary.
V. Burgess Hines.

Assistant Secretary.
George C. Vansant.

Medical Examiner.
N. G. Keirle, M.D.

Health Department—Continued.

Assistant Medical Examiner.

J. B. Schwatka, M.D.

Keeper of the Morgue.

Wm. H. Murphy.

Assistant Registrar's Clerk and Assistant Permit Clerk.

Montgomery Lawrence.

Permit Clerk.

M. A. Maloney.

Registrar's Clerk.

Jas. E. Hubbert.

Nuisance Clerk.

Harry C. Andrews.

Recorder of Births.

James E. King.

Sanitary Inspectors.

George N. Lewis,
Henry M. McKewen,
J. V. Fitzpatrick,
C. C. Leonard,
John M. DeGoey,
John Long,
August W. Lindenstruth.

Annex.

D. S. Williams, M.D.
Robert E. L. Hall, M.D.
B. F. Knight.
G. W. Phillips.

Health Department—Continued.

Vaccine Physicians.

First Ward.....Wm. H. Schwatka, M.D.
Second Ward.....N. L. Dashiell, Jr., M.D.
Third Ward.....Wm. H. Johnson, M.D.
Fourth Ward.....C. F. Maguire, M.D.
Fifth Ward.....Arthur Wegefarth, M.D.
Sixth Ward.....Francis A. Sauer, M.D.
Seventh Ward.....G. Henry Chabot, M.D.
Eighth Ward.....Henry F. Cassiday, M.D.
Ninth Ward.....W. C. Currey, M.D.
Tenth Ward.....Aug. Horn, M.D.
Eleventh Ward.....J. A. Gilliss, M.D.
Twelfth Ward.....Thos. P. McCormack, M.D.
Thirteenth Ward.....William Wolf, M.D.
Fourteenth Ward.....Joseph C. Wunder, M.D.
Fifteenth Ward.....William B. Burch, M.D.
Sixteenth Ward.....Joseph Blum, M.D.
Seventeenth Ward.....Henry Stark, M.D.
Eighteenth Ward.....Harry Boyd, M.D.
Nineteenth Ward.....John W. Linthicum, M.D.
Twentieth Ward.....Paul F. DeFord, M.D.
Twenty-first Ward.....Morris Shanks, M.D.
Twenty-second Ward....H. G. Prentiss, M.D.

Superintendent of East Baltimore Public Cemetery.

George Rinehart.

Superintendent of West Baltimore Public Cemetery.

George E. Brown.

Inspector of Plumbing.

James D. Stidham.

Inspector of Eastern District Sewers.

Henry Paff.

Health Department—Concluded.

Inspector of Western District Sewers.

Mark F. Gorman.

Superintendent of Canton Dump.

James Quinn.

Superintendent of Spring Garden Dump.

Charles F. Ringold,

Assistant Superintendent of Spring Garden Dump.

Frank Kelly.

Disinfector.

Daniel E. Carr.

Inspector of Drains.

Dennis Healy.

N. S. Detective.

Earnesty Tschudy.

Messenger.

Samuel Russell.

Analytical Chemist.

William P. Tonry, Ph.D., M.D.

Food Inspectors.

Patrick R. Welsh,
John H. Schaefer,
W. G. V. Hull.
Geo. A. Vernetson, *Clerk.*

Commissioner of Street Cleaning.

Bartholomew E. Smith.

John J. Walsh, *Clerk.*

Superintendents of Streets.

George W. Trumbo, *First District.*
George E. McCauley, *Second* "
Michael Fadgen, *Third* "
James F. Busey, *Fourth* "
Henry Lancaster, *Fifth* "
John Meagher, *Sixth* "
Joseph McGee, *Seventh* "

Superintendents of Roads.

George M. Chambers, 21*st Ward.*
Charles Carroll, 22*d Ward.*

Asssesor in 21st and 22d Wards.

J. C. LeGrand Cole.

Harbor Board.

His Honor Ferdinand C. Latrobe, *Chairman.*

J. Vernon Campbell, Fielder Slingluff,
James S. Woodside, E. J. Codd,
Henry Williams, Martin Wagner.

N. H. Hutton, *Engineer.*
James H. Irvin, Jr., *Clerk.*

Superintendent of City Hall.

Gilles J. Shaw.

Day Watchmen at City Hall.

James Merritt,
John Cosgrove,
Dennis Bergin.

Night Watchmen at City Hall.

John Schlereth,
John Roney.

Engineers at City Hall.

George W. Vandaniker,
Curtis B. Simonds.

Firemen at City Hall.

J. Thomas McGahan,
J. P. Kane,
James D. Danels,
Martin F. Healy.

Conductor City Hall Elevator.

C. S. Frazier.

Park Commission.

His Honor F. C. Latrobe, *Chairman.*

Douglas H. Thomas, German H. Hunt,
John S. Berry, John C. Froehlich,
David L. Bartlett, George R. Willis,

D. Rayhice, *Clerk.*

Water Department.

Commissioners.

His Honor F. C. Latrobe, *President.*

D. Meredith Reese, John E. Hurst,
William A. Marburg, Francis H. Hambleton,
Joseph S. Heuisler, Clinton P. Paine.

Water Department—Continued.

Registrar's Department.

E. Shriver, *Water Registrar.*
James A. Marrian, *General Bookkeeper.*
James S. Etchberger, *Cashier.*
James J. C. Scully, *Clerk of Errors.*
John T. Dailey, " "
A. J. C. White, *Ledger Clerk.*
E. J. Edwards, "
John Gibson, "
Timothy Ryan, Jr., "
Samuel A. Hart, "
J. Beale Howard, "
E. A. Hogg, *Meter Supply Clerk of Delinquents.*
T. J. Penning, *Assistant Meter and Supply Clerk of Delinquents.*

District Inspectors and Bill Distributors.

L. R. Dougherty, D. G. Carlisle,
William H. Johnson, S. L. Auerbach,
George H. Dalrymple, John F. Kearns,
Leonard C. Hornick, Barney L. Hess,
George A. Coleman, *Assistant Inspector.*
Geo. W. Emmerich, *Clerk and Special Inspector.*

Engineer's Department.

Wm. L. Kenly, *Acting Chief Engineer.*
Wm. Benthall, *First Asst. Chief Engineer.*
Chas. Krauss, *Assistant Mechanical Engineer.*
R. L. Clemmitt, *Draughtsman in Chief Eng'r's Office.*
J. Philip Huppman, *Chief Clerk.*
Lewis C. Curran, *Superintendent of Meter Supplies.*
John Shea, *Superintendent of Pumps and Fountains.*
M. C. Barclay, *Eng'r of Western Pumping Station.*
Wm. H. Coyle, *Asst. Eng'r Eastern Pumping Stat'n.*
Robt. Benthal, *Inspector of Gunpowder and Jones' Falls Extensions.*

Baltimore City Jail.

Board of Visitors.

Hon. F. C. Latrobe, *Ex-Officio.*
John Richardson, *President.*
Robert C. Davidson, *Secretary.*

A. C. N. Matthews,
Harry F. Turner,
August Berkemeier,
H. G. Dudley,

Daniel Constantine, *Warden.*
Stephen D. Broadbent, *Clerk.*
Dr. Milton N. Taylor, *Physician.*

Standing Committees.

DISCIPLINE. { John Richardson, A. Berkemeier, Harry F. Turner.
FINANCE... { Robert C. Davidson, Harry F. Turner.
REPAIRS ... { A. Berkemeier, Robert C. Davidson.
SUPPLIES .. { H. G. Dudley, A. C. N. Matthews.
SANITARY.. { Harry F. Turner, A. C. N. Matthews.

Deputy Wardens.

John Begnell,
Thomas M. Kenny,
Oliver S. Holland,
George H. Hummell,
John W. Reiter,
John Lotz,
Michael Kohlerman,
Samuel D. Myers,
Charles Warner,
Charles A. Dwyer,
George Hoffman,
Edward Burke,
John Cramer,
Frederick Wolfe,
H. J. Edell,
John O'Donnell,
Charles A. Hoffman.

Baltimore City Jail—Continued.

Wm. B. McEldon, *Engineer.*
Mrs. Frances Causey, *Matron.*
Mrs. Ellen Bishop, *Assistant Matron.*
Wm. Wenzel, *Substitute.*
J. B. Wells, "
Wm. T. Maxwell, "
Charles Helbing, *Baker.*
David Crotty, *Gardener.*
James Stanton, *Hostler.*
William H. Hall, *Purveyor.*

Commissioners of Public Schools.

First Ward.....Joseph L. Farnen.
Second Ward.....Simon L. Felber.
Third Ward.....John B. Wentz.
Fourth Ward.....George F. Louderman.
Fifth Ward.....William H. B. Fusselbaugh, of J.
Sixth Ward.....John T. Ochs.
Seventh Ward.....Martin B. Billingslea, M.D.
Eighth Ward.....John T. Foley.
Ninth Ward.....Michael Sheehan.
Tenth Ward.....John T. Morris.
Eleventh Ward.....William W. Dix.
Twelfth Ward.....James W. Denny.
Thirteenth Ward.....Charles J. Wiener.
Fourteenth Ward.....James Bosley, M.D
Fifteenth Ward.....John H. Carle.
Sixteenth Ward.....John D. Blake, M.D.
Seventeenth Ward.....Joseph P. McGonigle.
Eighteenth Ward.....Robert H. Cornthwaite.
Nineteenth Ward.....Merville H. Carter, M.D.

Commissioners of Public Schools—Continued.

Twentieth Ward.....James L. Murrill.
Twenty-first Ward....Daniel W. Smith, M.D.
Twenty-second Ward..Arthur H. Jackson.

John T. Morris, *President.*
Henry M. Cowles, *Secretary.*
Henry A. Wise, *Superintendent.*
John E. McCahan, *Assistant Superintendent.*
Albert Marshall, *Assistant Secretary.*
Christian W. Keidel, *Superintendent of Supplies.*
Francis J. Ruth, *Librarian.*
William F. O'Conor, *Clerk to Secretary.*

Trustees of the McDonogh Educational Fund and Institute.

David L. Barlett, *President.*

German H. Hunt, *Vice-Prest.* Robert H. Smith, *Sec'y.*
E. Stanley Garey, Enoch G. Hipsley,
Julien LeRoy White, William Keyser.

Trustees of Almshouse.

Joseph Friedenwald, *President.*
John Black, *Secretary.*

Simon I. Kemp, Ira Remsen, J. J. Pentz,
George A. Blake, John J. Hoffman.
Columbus W. Lewis, *Superintendent.*
John M. McElroy, *Purveyor.*
John R. Hammett, *Clerk and Storekeeper.*
Susanna McCahan, *Matron.*
James J. Farrall, *Engineer.*
William Montgomery, *Assistant Engineer.*
John F. Barrenger, *Gardener.*
Thomas Connor, *Messenger.*

Trustees of Almshouse—Continued.

Charles Jones, *Baker.*
Patrick Butler, *Carriage Driver.*

Medical Department.

Dr. Fred'k S. Caruthers, } *Resident Physicians.*
Dr. H. H. Hayden, }
Dr. James A. West, } *Insane Department.*
Dr. C. W. Didenhover, }
James A. Tierney, *Apothecary.*

Agent of Baltimore City for the Deaf and Dumb.

William R. Barry.

Director on Behalf of the City in the Female House of Refuge.

Joseph Merrefield, W. T. Biedler,
John M. Glenn, J. H. Scarff, M.D.
Edward B. Owens.

Managers on Part of the City of St. Mary's Industrial School.

Germanus France, R. W. L. Rasin,
Andrew W. Woodall.

Managers of House of Refuge on the Part of the City.

Dr. John G. Morris, Israel Rosenfeld,
William A. Knapp, John H. Hancock,
Dr. J. D. Iglehart, Archibald B. Coulter,
James H. Parrish, Warren H. Sadler,
James A. Gould, Davies Murdoch.

Managers on the Part of the City for the House of Reformation and Instruction for Colored Children.

William T. Brigham, Joseph J. Janney.

Managers on the Part of the City in the Industrial Home for Colored Girls.

Francis P. Stevens, Myer Bornheim.

Directors on the Part of the City in the Union Railroad Company.

J. Olney Norris, W. B. McAtee.

Visitor to Enoch Pratt Free Library.

Henry Duffy.

Directors on the Part of City in the Western Maryland Railroad Company.

Christian Devries, John C. Legg,
E. G. Hipsley, Samuel D. Schmucker,
Levi Weinberger, William S. Rayner,
Lloyd L. Jackson.

Directors on Part of the City in the Valley Railroad Company.

Osman Latrobe, H. Crawford Black.

Harbor Masters.

First District ..... Joseph E. Cromwell.
Second " ..... William E. Knoor,
Third " ..... Thomas Freeman.
Fourth " ..... George T. Hodes.
Fifth " ..... Michael A. Canton.
Sixth " ..... Charles Durm.

Inspectors of Weights and Measures.

Northwestern District ..... John A. Haeffner.
Northeastern " ..... William Henry.
Southwestern " ..... Patrick J. Brandy.
Southeastern " ..... Thos. Francis Herr.
Southern " ..... John C. Dietz.

Inspector of Long and Dry Measures.

William Bond.

Inspector of Coal Oil and Illuminating Gas.

Prof. P. B. Wilson.

General Superintendent of Lamps and Inspector and Sealer of Gas Meters.

W. Stuart Symington.

Inspector of Charcoal.

.....

Superintendent of Court House, Record Office and Grounds.

John D. Cook.

Watchman at Court House.

William Snyder.

Superintendent of City and Circuit Courts.

James Donnelly.

Watchman at Old Masonic Hall Building.

George A. Freburger.

Janitor of the Orphans' Court.

William J. Burke.

Keeper of Drawbridge.

William H. Konig,
Michael P. Gantley, *Assistant.*

Keeper of Washington Monument.

Sebastian Ettinger.

Keeper of Harman's Bridge.

Edward Stowman.

Keeper of North, Calvert and St. Paul Street Bridges.

James J. Moylan.

Keeper of Dog Pound.

Philip Kimmel.

Clerk of Centre Market.

John F. Bracken, *Assistant Clerk.*

Clerk of Lexington Market.

James A. Strong,
William H. Tibbals, *Assistant Clerk.*

Clerk of Fell's Point Market.

William A. Callahan.

Clerk of Belair Market.

Joseph H. Wright.

Clerk of Hollins Market.

James Biden.

Clerk of Hanover Market.

John H. Mortimer.

Clerk of Richmond Market.

George H. Clifton.

Clerk of Lafayette Market.

John Farrell.

Clerk of Cross Street Market.

Charles B. Kemper.

Clerk of Northeastern Market.

Charles Briggeman.

Clerk of Canton Market.

John Cadden.

Keeper of Hall Over Broadway Market.

Charles W. Nelson.

Keeper of Market Under Maryland Institute.

John H. Bogue.

Commissioners of Union Square.

Andrew J. Fairbank, Lewis Kalling,
Walter N. Smith.

Commissioners of Lafayette Square.

D. H. Stevenson, W. C. Sanderson, H. G. Vickery.

Commissioners of Franklin Square.

Dr. James W. Bowers, Dr. J. Dimmett Norris,
John F. Adams.

Commissioners of Eutaw Place Squares—First Division.

Wm. T. Levering, A. G. Stabler, A. C. Trippe,
J. M. Wharton, Charles H. Carter.

Commissioners of Eutaw Place Squares—Second Division.

George W. Wood, Alexander H. Russell,
George J. Popplein.

Commissioners of Mount Vernon Square.

Thomas M. Lanahan, William F. Burns,
Thomas Deford.

Commissioners of Madison Square.

John Solter, John H. Hoeck, Chas. H. Davis.

Commissioners of Jackson Square.

Wm. G. Dougherty, H. D. Adams, B. Frank.

Commissioners of Harlem Park.

William P. Reese, George W. Jones,
Edward A. Holmes.

Commissioners of Eastern City Spring Square.

John W. Cruett, Geo. Courtney, Aug. Hellweg.

Commissioners of Broadway Squares—First Division.

Edwd. C. Claus, A. McClintock, Wm. Cowen.

Commissioners of Broadway Squares—Second Division.

Wm. H. McElroy, Chas. F. Henderson, Louis Zink.

Commissioners of Broadway Squares—Third Division.

Geo. E. Saville, Edw. N. Waters, Adam Neuse, Jr.

Commissioners of Perkins Spring Square.

Joseph Harris, J. Frank Wilhelm, Jos. W. Dell.

Commissioners of Park Place.

John F. Parlett, Manes E. Fuld, John K. Shaw.

Commissioners of Taney Place.

Jos. S. West, A. B. Clark, J. H. Wight.

Commissioners of Ashland Square.

Jas. Sapp, Edward G. Medinger, Richard S. Bridge.

Commissioners of Brewer Square.

H. R. Vonderhorst, Frederick Heineman,
Henry H. Dill.

Commissioners of Wilkens Avenue Squares.

Gustave Siegmund, Frederick J. Cahill,
Myer Goldburg, George P. Carr,
Edward Andrews.

Commissioners of Mount Royal Avenue Square.

Michael Jenkins, Henry E. Baltzell,
R. W. Templeman.

Commissioners of Fulton Avenue Squares and Circle at Baker Street and Fulton Avenue.

J. H. Menslage, Thomas F. Locke, Wm. J. Miller.

Keeper of Madison Square.

John Baker.

Keeper of Perkins Spring Square.

John Garey.

Keeper of Union Square.

George T. Price.

Keeper of Harlem Square.

W. R. Strickland.

Keeper of Lafayette Square.

Henry Manion.

Keeper of Fulton Avenue Squares.
John L. Mantler.

Keeper of Franklin Square.
F. D. Field.

Keeper of Eastern Fountain.
Richard Phillips.

Keeper of Broadway Squares—First Division.
Frederick W. Williams.

Keeper of Broadway Squares—Second Division.
John K. Hirzel.

Keeper of Broadway Squares—Third Division.
Joseph Krastel.

Keeper of Mount Royal Avenue Square.
Peter Needham.

Keeper of Ashland Square.
John C. Gareis.

Keeper of Jackson Square.
Herman Kumlehn.

Keeper of Taney Place.
August Bechtold.

Ward Managers of the Poor.

First Ward.....Theo. Von Rintelln.
Second Ward.....George Schaeffer.
Third Ward.....Richard C. Kemp.
Fourth Ward.....Charles F. Evans.
Fifth Ward.....C. Crane.
Sixth Ward.....James E. Sturgeon.
Seventh Ward.....Alexander Bond.
Eighth Ward.....Michael Hagan.
Ninth Ward.....Thomas Gordon.
Tenth Ward.....Michael Hess.
Eleventh Ward.....Charles F. Taylor.
Twelfth Ward.....R. G. Keene.
Thirteenth Ward.....John H. Hancock.
Fourteenth Ward.....T. P. Perine.
Fifteenth Ward.....Joseph J. Harig.
Sixteenth Ward.....Peter Hines.
Seventeenth Ward.....Wm. L. P. Riggin.
Eighteenth Ward.....John P. Fahey.
Nineteenth Ward.....George A. Smith.
Twentieth Ward.....John B. Thomas, Jr.,
Twenty-first Ward.....
Twenty-second Ward.....

Superintendents of Lamplighters.

George H. Smith, *Acting Supt. Southern District.*
Charles D. Moore, *Annex.*
Richard E. Hardin, *Northwestern District.*
John E. Ward, *Western District.*
Edward Hammer, *Eastern District.*
Charles J. Daugherty, *Northeastern District.*
Joshua E. Stinchcomb, *Southwestern District.*

Lamplighters.

First Ward—John Potter,
Stephen Flaherty,
Michael Herr,
George Langgood,
Thomas W. Fitzgerald.

Second Ward—John Burke,
Jacob Ziegler,
John T. Brown,
John Schaeler,
William J. Kelly.

Third Ward—Henry Kimmelman,
Michael Wagner,
Charles Hitroth,
George W. Bandell,
John G. Moore, *at large.*
Charles A. Borneman.
Henry Anton.

Fourth Ward—Patrick Birthistle,
Lawrence Ward,
John Spellman,
Carston Schultz,
Jerry Harrigan.

Fifth Ward—John W. Disney,
J. Ahearns,
Frank Morrell,
Thomas Kilduff,
William Dennis.

Lamplighters—Continued.

Sixth Ward—Frank Kminek,
Thomas J. Duvall,
Martin Ruppert,
James Finch,
Joseph Wagner.

Seventh Ward—Harry W. White,
Victor Hirshauer,
Andrew Emeline,
James Babka,
Jacob Tragesser.

Eighth Ward—William Holden,
John McSweeney,
Frank Gutberlet,
Peter Hefferman,
David Mills,
Hy. Burns, *at large.*

Ninth Ward—Lewis J. Hess,
George H. Smith,
Thomas Keho,
Michael Collins,
John Garrity, Jr.

Tenth Ward—Max Kohlenstine,
Baltasar Schneider,
Joseph Steinkamp,
Valentine Baum,
Joseph Johnson.

Lamplighters—Continued.

Eleventh Ward—Andrew J. Norris, Jr.,
Charles C. Pease,
Jacob Schoedel,
Jacob Pollety,
John Rinn.

Twelfth Ward—Thomas Rooney,
Thomas Hand,
Dennis Hogan,
George W. Courts,
Alonzo Underwood.

Thirteenth Ward—Edward J. Schnur,
Joseph B. McConville,
Thomas M. Hynes,
Owen McHugh,
Dennis A. Griffith.

Fourteenth Ward—William J. Griffin,
Patrick Spearman,
Joseph Countess,
Stephen McDonald,
Thomas Hibbetts.

Fifteenth Ward—Michael Ragan,
George W. Behrens,
Hugh Curley,
Michael Kane,
William Hoffman.

Lmplighters—Continued.

Sixteenth Ward—Daniel Zimmer,
Charles Karey,
William Pistel,
Michael Murphy,
Thomas Bentley, Jr.,

Seventeenth Ward—Thomas Cunningham,
Henry E. Davis,
William Amey,
John McMann,
Jeff Fitzgerald.

Eighteenth Ward—John Jeffers,
William Brady,
Francis Kernan, *at large*,
Michael Manning,
William H. Caulk,
John Gaston.

Nineteenth Ward—Stephen L. Hurley,
Jacob Schierlitz,
Henry Arnold,
Alex. C. Berry,
Adam Truelieb.

Twentieth Ward—William J. Egan,
Nathan Wright,
J. G. Wutz,
Wm. H. L. Lockwood, *at large*,
Wm. M. Kelly,
Wm. H. Rhinehart.

Lamplighters—Concluded.

Twenty-first Ward—James A. Hamilton,
W. Stapf,
W. H. Pease,
Leroy Kidd,
George McGee,
J. Kepple,
William H. Darenberger,
Andrew Koerner,
Matthew Steinacker,
John O. Chilcoat,
Charles Kepple,
Frederick Schneider,
Adam Hahn,
Frank Waxter,
George E. Gebhardt.

Twenty-second Ward—Chris. Fisher,
Henry Beach,
Caleb N. Williams,
J. Knight,
George H. Fisher,
George M. Hargest,
Henry D. Brown,
John F. Skipper,
Frank Deals,
Leonard Forlifer,
John H. McFall,
John W. Lee,
John H. Maxfield,
Ephraim Orem,
Edward J. White,
Henry C. Kennedy,
Thomas J. Johnson.

Constables.

First	Ward	John Sanner.
"	"	Frederick C. Jacobs.
Second	"	Charles P. Dunigan.
"	"	Abraham Goldstein.
Third	"	William J. Bransby.
"	"	Theodore Dauphin.
Fourth	"	George McCart.
"	"	Frank H. Abbess.
Fifth	"	George W. Earhart.
"	"	R. G. S. House.
Sixth	"	Joseph Womiskey.
"	"	Joseph Varerina.
Seventh	"	Godfrey Koffenberger.
"	"	James C. Griffin.
Eighth	"	W. W. Rollins.
"	"	George H. Winchester.
Ninth	"	I. N. Zipprian.
"	"	James Loane.
Tenth	"	Edward A. Keyser.
"	"	R. S. Ryan.
Eleventh	"	Edward C. Lilly.
"	"	Thomas R. Morse.
Twelfth	"	P. H. C. Stitcher.
"	"	Stephen A. Morse.
Thirteenth	"	Charles Strasser.
"	"	John Carroll.
Fourteenth	"	E. A. Letzer.
"	"	John T. Barber.
Fifteenth	"	William B. Lyons.
"	"	W. B. Saylor.

Constables—Continued.

Sixteenth	Ward	Charles B. Keyser.
"	"	Charles J. Swope.
Seventeenth	"	George W. Carrick.
"	"	David P. West.
Eighteenth	"	H. G. W. Woodall.
"	"	Geo. Hammerbacker.
Nineteenth	"	Charles H. Shipley.
"	"	Charles M. McCann.
Twentieth	"	Thomas J. Hardesty.
"	"	Andrew Greentree.
Twenty-first	"	Theodore N. Weems.
"	"	S. Otto.
Twenty-second	"	George T. Wise.
"	"	Leo Hayden.

Officers of the Fire Department.

Fire Commissioners.

J. Alexander Preston, *President.*

John F. Hunter, George May.

Secretary and Clerk.

David H. Lucchesi.

Chief Engineer.

John J. Ledden.

District Engineers.

No. 1—George W. Horton, No. 4—Fielding H. Lucas,
No. 2—William M. Dunn, No. 5—Frank K. Conway,
No. 3—William C. McAfee, No. 6—Wm. A. Larkins.

Superintendent of Machinery.
George J. Linsenmeyer.

Superintendent of Police and Fire-Alarm Telegraph.
Charles J. McAleese.

Operators—Alexander Crummer, F. L. McAleese, J. F. O'Mailey, John J. McCoy.

Substitute Operator—Charles C. Prince.

Lineman—John M. Nugent.

Assistant Lineman—Charles J. Hellings,
" " John Durkan,
" " Thomas W. Glass.

Batteryman—Robert Kain.

No. 1 Engine.

J. Thomas Dunn.....*Captain.*
William F. Morrow.....*Lieutenant.*
Charles E. Freeburger .....*Engineman.*
John W. Eckhardt.....*Ass't Engineman.*
Lewis J. Fresch .....*Hostler.*
Edward R. Addison.....*Pipeman.*
Albert Oelman ..... "
Frank A. Hanssen..... "
Charles C. Stone. ..... "
John J. McCarthy..... "
Frederick Viehmeyer. ..... "

No. 2 Engine.

William R. Ward..... *Captain.*
Maurice C. Bollman..... *Lieutenant.*
William J. Dohler..... *Engineman.*
Daniel H. Weber..... *Ass't Engineman.*
Frank Hines..... *Hostler.*
William Eckert..... *Pipeman.*
George C. Young..... "
George H. Hewitt..... "
Wm. H. Bell..... "
William Birckhead..... "
Charles C. Rice..... "
John Moeller..... "

No. 3 Engine.

Benjamin Price..... *Captain.*
Levin H. Burkhardt..... *Lieutenant.*
Patrick F. Moriarity..... *Engineman.*
Thomas G. Huth..... *Ass't Engineman.*
John F. Peerce..... *Hostler.*
G. Louis Schlimm..... *Pipeman.*
R. H. Dougherty..... "
Herman Fumbaugh..... "
August Schlimm..... "
James T. Pearl..... "
John T. Seabreeze..... "

No. 4 *Engine.*

Herman F. Bichy..... *Captain.*
George W. Bentz..... *Lieutenant.*
John Gaffney..... *Engineman.*
Herbert W. Peerce..... *Ass't Engineman.*
Wm. H. Ryan..... *Hostler.*
Constant Siebert..... *Pipeman.*
William E. Stewart..... "
George E. Croucher..... "
William H. Cullen..... "
John M. Frederick..... "
Edward Tauber..... "
Joseph Ott..... "

No. 5 *Engine.*

Andrew W. German..... *Captain.*
Charles Rosenthal..... *Lieutenant.*
Frederick L. Nelson..... *Engineman.*
John N. Bletzer..... *Ass't Engineman.*
Henry Murphy..... *Hostler.*
William B. Baker..... *Pipeman.*
John H. Reitz..... "
Henry R. Seippel..... "
Anthony Schoepplein..... "
John F. Bilson..... "
William Hastler..... "

No. 6 Engine.

Richard N. Pittinger.....*Captain.*
Charles Betz.....*Lieutenant.*
Matthew Mulligan.....*Engineman.*
Thomas F. Sexton.....*Ass't Engineman.*
B. F. Seipp.....*Hostler.*
John A. McKew.....*Pipeman.*
F. C. H. Berger..... "
Isaac Cuddy..... "
J. F. Maguire..... "
George Sykes..... "
Frederick W. Harman..... "
Harry Heinze..... "

No. 7 Engine.

John B. Bortell.....*Captain.*
Lawrence Pistel.....*Lieutenant.*
Samuel W. Stansbury.....*Engineman.*
Frank E. Nehren.....*Ass't Engineman.*
Harman Schiminger.....*Hostler.*
Charles A. Soistman.....*Pipeman.*
John Weinkamp..... "
George Schneider..... "
Edward Minetzberger..... "
William McGann..... "
Frederick W. Johnston, Jr..... "

No. 8 *Engine.*

Andrew J. Walter.....*Captain.*
Frederick W. Johnson, Sr.....*Lieutenant.*
John A. Bannon.....*Engineman.*
William F. Awalt.....*Ass't Engineman.*
William J. Stewart.....*Hostler.*
Greenway B. Chapman.....*Pipeman.*
Charles Airey..... "
Jacob Rupp..... "
John Krauss..... "
James McGlennan..... "
John J. Murphy..... "

No. 9 *Engine.*

David H. Macaulay.....*Captain.*
Solomon Uhlfelder.....*Lieutenant.*
Daniel R. Rogers.....*Engineman.*
William H. Stanton.....*Ass't Engineman.*
William B. Baker.....*Hostler.*
James McDevitt.....*Pipeman.*
Charles C. Neilson..... "
Clinton B. Baker..... "
W. F. Cuddy..... "
Elias G. Kipp..... "
John Amendt..... "

No. 10 *Engine.*

Henry Stagge.....*Captain.*
Charles Romoser, Jr.....*Lieutenant*
John W. Walsh.....*Engineman.*
James Nugent.....*Ass't Engineman.*
Hunter S. Shettle.....*Hostler.*
Justice G. Keilholtz.....*Pipeman.*
Samuel W. Marker..... "
Henry Zachman..... "
John Eigenbrodt..... "
Henry Ludwig..... "
John F. Pons..... "

No. 11 *Engine.*

Michael A. Lind.....*Captain.*
Thomas Flaherty.....*Lieutenant.*
John Calder.....*Engineman.*
John Lindeman.....*Ass't Engineman.*
Patrick Birthistle.....*Hostler.*
Joshua H. Miller.....*Pipeman.*
Albert H. Gier..... "
George Shipley..... "
Benjamin V. Beyer..... "
Charles E. DeWitt..... "
John W. Barton..... "

No. 12 *Engine.*

George W. Smith.....*Captain.*
Edward C. Klessel.....*Lieutenant.*
Michael Lycett.....*Engineman.*
William F. Welch.....*Ass't Engineman.*
Joseph W. Moon.....*Hostler.*
James Catterton.....*Pipeman.*
Thomas Voyce..... "
Peter McGonigle..... "
Gerhardt Tabeling..... "
Casper Kraft..... "
Edward Norton..... "

No. 13 *Engine.*

John Hoffman.....*Captain.*
Thomas J. Strahler.....*Lieutenant.*
John H. Deal.....*Engineman.*
Edward G. Riley.....*Ass't Engineman.*
Thomas H. Wright.....*Hostler.*
Philip Bowen.....*Pipeman.*
Wilbur Pierce..... "
James Keyser..... "
Philip L. Brady..... "
Warren J. Stafford..... "
James Nolen..... "

No. 14 *Engine.*

William H. Dunn.....*Captain.*
George A. Wright.....*Lieutenant.*
Thomas S. Atkinson.....*Engineman.*
Cornelius P. Kuhan.....*Ass't Engineman.*
John W. Cook.....*Hostler.*
Charles H. Baker.....*Pipeman.*
C. Allen Orem..... "
J. Oscar Healey..... "
George E. Hibline..... "
Leonard Jessop ..... "
Hugh P. Fox..... "

No. 15 *Engine.*

John Todd.....*Captain.*
George W. Haskell .....*Lieutenant.*
Edward F. Kelly..... "
John Conway .....*Engineman.*
George C. Lloyd.....*Ass't Engineman.*
John J. Cahill..... "
Mark Hill .....*Hostler.*
Andrew J. Connelly.....*Pipeman.*
James T. Braden..... "
George H. Rush..... "
August Lang..... "
Charles L. Schulte..... "
Louis Harrer..... "
Jacob W. Dohler ..... "
Louis Hauer..... "
Cooper Elliott..... "
August J. Schenkleburg ..... "
Michael E. Lynch..... "
Samuel E. McElwee..... "
John Kahl ..... "

No. 16 *Engine.*

Richard A. Lindsay ..... *Captain.*
John Prenger ..... *Lieutenant.*
John H. Brown..... *Pilot.*
William C. Stallings ..... "
Thomas B. Meushaw..... *Engineman.*
William T. Hubbard ..... *Ass't Engineman.*
John H. Stutt..... " "
George H. Little. ..... *Pipeman.*
Joseph Zeidler. ..... "
James H. Hoey. ..... *Stoker.*
James Hayden ..... "
George Horley ..... "

No. 18 *Engine.*

Frederick Brannan. ..... *Captain.*
John F. Kelly..... *Lieutenant.*
Thomas S. Brown ..... *Engineman.*
John I. Cranford ..... *Ass't Engineman.*
John W. Potts..... *Hostler.*
Robert H. Blatchley..... *Pipeman.*
William H. Quincy. ..... "
John F. MacKenzie..... "
Henry A. Moeller..... "
Andrew J. McCormick ..... "
Charles E. Brown..... "
Samuel A. Seymour ..... "

No. 1 *Hook and Ladder.*

E. Louis Shipley ..... *Captain.*
August Emerich. ..... *Lieutenant.*
Thomas B. Strahan..... *Tillerman.*
Thomas Kerr..... *Ass't Tillerman.*
John T. Mulligan..... *Hostler.*
Martin Kirby ..... *Ladderman.*
Joseph Daily..... "
Andrew Orr..... "
Zach. T. Seabreeze..... "
Robert B. Edwards..... "
George F. Thompson, Jr..... "

No. 2 *Hook and Ladder.*

Thomas Montgomery..... *Captain.*
John W. Kelly..... *Lieutenant.*
John W. Blake..... *Tillerman.*
Emil Heise..... *Ass't Tillerman.*
Joseph Lavender..... *Hostler.*
J. Frederick Schaefer..... *Ladderman.*
Alonzo Travers..... "
James A. Campbell..... "
William H. Stapf ..... "
Henry F. Eckels ..... "
Paul L. Linde..... "

No. 3 Hook and Ladder.

George W. Foxwell.....*Captain.*
Peter Nelson.....*Lieutenant.*
John M. Douns.....*Tillerman.*
John Koos.....*Ass't Tillerman.*
John Croucher.....*Hostler.*
Bernhard P. Rudel.....*Ladderman.*
John McClellan..... "
James F. Reilly..... "
Charles W. Johnson..... "
Robert R. Perry..... "
George B. King..... "
Frederick Grauling..... "

No. 4 Hook and Ladder.

William White.....*Captain.*
John H. Morgan.....*Lieutenant.*
William A. Meushaw.....*Tillerman.*
John Kurne.....*Ass't Tillerman.*
James B. Kelley.....*Hostler.*
Jacob A. Wisong.....*Ladderman.*
William Leonard..... "
George E. Gill..... "
John J. Gill..... "
Malcolm Jordan..... "
Charles Sapp..... "
George Kennard..... "

No. 5 *Hook and Ladder.*

William H. Hartman.....*Captain.*
Lawrence Blake.....*Lieutenant.*
William T. Johns.....*Tillerman.*
Howard E. Curry.....*Ass't Tillerman.*
William Quinn.....*Hostler.*
William Wiley.....*Ladderman.*
William F. Beall..... "
James J. McGraw..... "
John Sullivan..... "
Peter B. Mullen..... "
John L. Emerson..... "
Harry F. Bodge..... "

No. 6 *Hook and Ladder.*

Thomas D. O'Keefe.....*Captain.*
Frederick G. Beck.....*Lieutenant.*
James Gill.....*Tillerman.*
Antone Kemp.....*Ass't Tillerman.*
George D. Taylor..... *Hostler.*
William L. Dailey.....*Ladderman.*
Daniel Vogelgesang..... "
William Lalotte..... "
Thomas H. Kelly..... "
Louis Matthai..... "
Charles F. Fay..... "
Henry Toepfer..... "

Fire Department—Annex.

No. 1 *Chemical Engine.*

Edward N. Steinacker.....*Captain.*
John A. Epp.....*Hostler.*
Antone Yienger.....*Pipeman.*

No. 2 *Chemical Engine.*

James H. Merrick.....*Captain.*
James K. Merriken.....*Hostler.*
Christian Freyer.....*Pipeman.*

No. 3 *Chemical Engine.*

Ralph S. Ferguson.....*Captain.*
James A. Clark.....*Hostler.*
Michael J. Griffin.....*Pipeman.*

No. 4 *Chemical Engine.*

William H. Taylor.....*Captain.*
Owen McGreevey.....*Hostler.*
James Hart.....*Pipeman.*
Michael Farley..... "

No. 5 *Chemical Engine.*

Samuel R. Watkins.....*Captain.*
Robert F. McFarland.....*Hostler.*
John W. Schaefer.....*Pipeman.*

No. 6 *Chemical Engine.*

Frank Maher.....*Captain.*
Zachariah H. Foote.....*Hostler.*
John E. Wallace.....*Pipeman.*

No. 7 *Chemical Engine.*

James J. Reynolds.....*Captain.*
James L. Clarken.....*Hostler.*
John L. Thomas.....*Pipeman.*

No. 7 Hook and Ladder.

Joseph J. Presley.....*Hostler.*

No. 8 Hook and Ladder.

John L. Durham.....*Hostler.*

No. 9 Hook and Ladder.

George U. McFadden.....*Hostler.*

Judges and Clerks of Courts.

Hon. Henry D. Harlan,
" J. Upshur Dennis,
" Albert Ritchie,
" Charles E. Phelps,
" Pere L. Wickes,
" Daniel Giraud Wright.

Clerk of the Superior Court.

James Bond.

Clerk of the Court of Common Pleas.

John T. Gray.

Clerk of the Circuit Court.

Alvin Robertson.

Clerk of the Circuit Court No. 2.

William R. Brewer.

Clerk of the Criminal Court.

Hiram G. Dudley.

Clerk of the City Court.

Henry A. Schultz.

COMMITTEES

— OF THE —

CITY COUNCIL OF BALTIMORE

FOR THE YEAR 1893-94.

JOINT STANDING COMMITTEES.

WAYS AND MEANS.

First Branch.	*Second Branch.*
Jones, John M.	Deupert, Adam
Leonard, John F.	Fahey, John T.
Depkin, Bernard	McMahon, Terrence

BRIDGES.

First Branch.	*Second Branch.*
Robertson, William J.	Barnes, Hanson P.
McClellan, James E.	Swindell, W. B.
Heineman, John	Rodgers, Patrick

WATER.

First Branch.	*Second Branch.*
Stewart, Walter H.	Rodgers, Patrick
Brannan, Charles H. S.	Barnes, Hanson P.
Smith, Joseph H.	Swindell, W. B.

CLAIMS.

First Branch.	*Second Branch.*
Packham, Eldridge	Kelso, John R.
Stewart, Walter H.	Fahey, John T.
Hooper, Alcaeus	Deupert, Adam

HIGHWAYS.

First Branch.	*Second Branch.*
Doyle, John F.	Fahey, John T.
Packham, Eldridge	Clark, Daniel E.
Brennan, M. E.	Spindler, Frederick

HEALTH.

First Branch.	*Second Branch.*
Windfelder, John H.	McMahon, Terrence
Brannan, Charles H. S.	Rodgers, Patrick
Durding, John E.	Barnes, Hanson P.

MARKETS.

First Branch.	*Second Branch.*
Weber John	Rigger, Lawrence
Heineman, John	Kelso, John R.
Hellbach, Henry	Barnes, Hanson P.

CITY PROPERTY.

First Branch.	*Second Branch.*
Brennan, M. E.	McMahon, Terrence
Doyle, James	Swindell, W. B.
Stewart, Walter H.	Fahey, John T.

EDUCATION.

First Branch.	*Second Branch.*
Ogden, William J.	Clark, Daniel E.
Windfelder, John H.	Kelso, John R.
Durding, John E.	Deupert, Adam

HOUSE OF REFUGE.

First Branch.	*Second Branch.*
Smith, Joseph H.	Swindell, W. B.
Ogden, William J.	Spindler, Frederick
Robertson, William J.	McMahon, Terrence

INTERNAL IMPROVEMENTS.

First Branch.	*Second Branch.*
Doyle, James	Kelso, John R.
Hooper, Alcaeus	Fahey, John T.
Smith, Joseph H.	Deupert, Adam

FIRE DEPARTMENT.

First Branch.	*Second Branch.*
Brown, Martin B.	McMahon, Terrence
Weber, John	Clark, Daniel E.
Packham, Eldridge	Rigger, Lawrence

POLICE AND JAIL.

First Branch.	*Second Branch.*
Brannan, Charles H. S.	Rodgers, Patrick
Brennan, M. E.	Rigger, Lawrence
Heineman, John	Spindler, Frederick

HARBOR.

First Branch.	*Second Branch.*
Windfelder, J. H.	Barnes, Hanson P.
Durding, John E.	Clark, Daniel E.
Langhammer, J. F.	Spindler, Frederick

CITY PASSENGER RAILWAYS.

First Branch.	*Second Branch.*
Leonard, John F.	Deupert, Adam
Doyle, John F.	Rigger, Lawrence
Durding, John E.	Spindler, Frederick

ALMSHOUSE.

First Branch.	*Second Branch.*
Weber, John	Barnes, Hanson P.
Langhammer, J. F.	Kelso, John R.
Smith, James H.	Rigger, Lawrence

JONES' FALLS.

First Branch.	*Second Branch.*
Stewart, Walter H.	Spindler, Frederick
Brennan, M. E.	Rodgers, Patrick
Robertson, W. J.	Swindell, W. B.

McDONOGH BEQUEST.

First Branch.	*Second Branch.*
Smith, Joseph H.	Swindell, W. B.
Brannan, Charles H. S.	Dupert, Adam
Hellbach, Henry	Clark, Daniel E.

PARKS.

First Branch.	*Second Branch.*
Hellbach, Henry	Spindler, Frederick
Ogden, William J.	Rigger, Lawrence
Smith, Joseph H.	Barnes, Hanson P.

COMMERCE AND MANUFACTURES.

First Branch.	*Second Branch.*
Hooper, Alcaeus	Swindell, W. B.
Brannan, Charles H. S.	McMahon, Terrence
McClellan, James E.	Clark, Daniel E.

PRINTING.

First Branch.	*Second Branch.*
Durding, John E.	Rigger, Lawrence
Depkin, Bernard	Barnes, Hanson P.
Heineman, John	Spindler, Frederick.

ENROLLMENT.

First Branch.	*Second Branch.*
Jones, John M.	Deupert, Adam
Depkin, Bernard	Kelso, John R.

JOINT SELECT COMMITTEES.

REGISTER'S ACCOUNTS.

First Branch.	*Second Branch.*
Ogden, William J.	Deupert, Adam
Depkin, Bernard	Rodgers, Patrick
Brown, Martin B.	Fahey, John T.

COMMISSIONERS OF PUBLIC SCHOOLS ACCOUNTS.

First Branch.	*Second Branch.*
Windfelder, John H.	Clark, Daniel E.
Stewart, Walter H.	Rigger, Lawrence
Doyle, James	Rodgers, Patrick

COMMISSIONERS OF FINANCE ACCOUNTS.

First Branch.	*Second Branch.*
Jones, John M.	Swindell, W. B.
Hooper, Alcaeus	Fahey, John T.
McClellan, James E.	Rodgers, Patrick

COMPTROLLER'S ACCOUNTS.

First Branch.	*Second Branch.*
Hooper, Alcaeus	Swindell, W. B.
Brannan, Charles H. S.	McMahon, Terrence
Heineman, John E.	Spindler, Frederick

WATER COMMISSIONERS' ACCOUNTS.

First Branch.	*Second Branch.*
Brennan, M. E.	Kelso, John R.
Weber, John	Barnes, Hanson P.
Robertson, William J.	Deupert, Adam

CITY COMMISSIONERS' AND HARBOR COMMISSIONERS' ACCOUNTS.

First Branch.	*Second Branch.*
Doyle, John F.	McMahon, Terrence
Leonard, John F.	Spindler, Frederick
Windfelder, John H.	Clark, Daniel E.

HEALTH COMMISSIONER'S ACCOUNTS.

First Branch.	*Second Branch.*
Durding, John E.	Spindler, Frederick
Ogden, William J.	Rodgers, Patrick
Heineman, John E.	Rigger, Lawrence

COMMISSIONERS OF FIRE DEPARTMENT ACCOUNTS.

First Branch.	*Second Branch.*
Brown, Martin B.	Clark, Daniel E.
McClellan, James E.	Swindell, Walter B.
Stewart, Walter H.	Deupert, Adam

Joint Special Committee for the Introduction of the Waters of the Gunpowder River into the City.

First Branch.	*Second Branch.*
Brennan, M. E.	Swindell, W. B.
Heineman, John	Deupert, Adam
Langhammer, John F.	Rigger, Lawrence
Stewart, Walter H.	Kelso, John R.
Weber, John	Barnes, Hanson P.

Annual Report

— OF THE —

Trustees of the McDonogh Fund.

JANUARY, 1894.

BOARD OF TRUSTEES.

1893-'94.

OFFICERS:

DAVID L. BARTLETT, *President.*
GERMAN H. HUNT, *Vice-President.*
ROBERT H. SMITH, *Secretary.*
DAVID L. BARTLETT, *Treasurer Barnum Bequest.*

TRUSTEES:

DAVID L. BARTLETT, - -	205 East German Street.
GERMAN H. HUNT, - -	Equitable Building.
ENOCH G. HIPSLEY, - -	Old Town Bank.
WILLIAM KEYSER, - -	205 East German Street.
JULIAN LEROY WHITE, -	12 St. Paul Street.
ROBERT H. SMITH, - -	622 Equitable Building.
E. STANLEY GARY, - -	108 West German Street.

STANDING COMMITTEES:

Finance:
WILLIAM KEYSER, E. S. GARY.

Education:
G. H. HUNT, WILLIAM KEYSER.

Barnum and Tagart Bequests:
G. H. HUNT, J. L. WHITE.

Buildings:
G. H. HUNT, E. S. GARY.

Legislation:
R. H. SMITH, J. L. WHITE.

Farm and Lands:
E. G. HIPSLEY, R. H. SMITH.

Housekeeping and Supplies:
G. H. HUNT, E. G. HIPSLEY.

NOTE.—The President of the Board is chairman of each of the Standing Committees.

REPORT OF THE PRESIDENT.

OFFICE OF THE McDONOGH EDUCATIONAL FUND AND INSTITUTE,

BALTIMORE, January 1, 1894.

To the Honorable the Mayor
and City Council of Baltimore:

GENTLEMEN:

We herewith present the Annual Report of the Trustees of the McDonogh Educational Fund and Institute, in compliance with the requirements of the ordinance creating the Board. The condition of the McDonogh Fund and of the Tagart and Barnum Bequests will be found in the Financial Report.

The school the past year has been blessed, in the main, with excellent health, and satisfactory progress has been made by the scholars in their studies. It is a source of great satisfaction to the Board of Trustees that there is so little trouble in getting positions for the boys when they graduate from the school. The habits of industry and method that are acquired in the training of the school make their services much sought for and give them a fair start on their life's work. It is not unusual to have more positions offered for our graduates than we have boys to fill them.

Mr. D. C. Lyle, who had been the principal of the school since the death of Colonel Allan, expressed a desire to retire from its duties. His health had not

been all that he could have wished, which made him feel that he could be more useful to the school as a teacher than as its principal. The trustees did not coincide with his views, as he had given perfect satisfaction as principal and had carried out perfectly the traditions of our former principal that had given the school its high standing, and it was with great regret that the change was finally acceded to. The Board of Trustees would here bear its testimony to the untiring, unselfish spirit with which Mr. Lyle performed all the duties of principal of the school.

In looking for a principal for the school there were a number of gentlemen recommended for the place, but we found they had ties where they were employed that prevented their accepting any new field of labor. Finally the Rev. Dr. James T. Edwards was recommended by parties in whom we had confidence, and a correspondence was opened that led to his paying the school a visit and looking over the field of duty that he was expected to fill. We then corresponded with different educators, and from those who had known him the longest time and most intimately the testimonials of his ability and character were so satisfactory that we concluded to offer him the position of principal of the school, which he accepted, his services to commence with the scholastic year, August, 1893.

Dr. Edwards is a gentleman who has had large experience in teaching, having been the principal for a number of years of a large school in Randolph, New York, which had been successfully conducted, and he had been connected with the principal educational

movements in his State, giving him an opportunity to become acquainted with the most modern system of education now in practice.

Dr. Edwards brings to the school a wife and two daughters, who add to its social atmosphere, and who, with the ladies already at the school, take part in the Bible lessons and religious teaching on Sundays.

There has been since the commencement of the school a want of some place for the boys to exercise in during the winter months. The severe winter of 1893 caused much suffering from the inadequate quarters where the boys could meet for play and exercise, and for a place where they could form to march to their meals. To meet this want the Board have built the past summer what has been discussed for several years, a gymnasium that has a floor space 47 feet by 100 feet. This gives ample room for forming or drill, that have heretofore been suspended in the winter months, and perfectly answers the purpose for which it was intended. The basement, which is above ground and light, has been divided to make two rooms, one of which is to be used as a museum to put in cases the work made in the Barnum shops, as well as such curiosities as the alumni may from time to time present to the school, the other as the boys' trunk room and workshop, where they make and repair their traps, etc.

The Barnum shops, for technical education, have been much improved the past season by the addition of a gas engine to furnish power and machinery to make the shops more complete. The progress made by the

boys in these shops has been quite marked. They make their own drawings and show much intelligence in the use of tools.

There were two houses on the farm, occupied by farm hands, that had been beyond repair. The Board decided that it was more economical to replace them with new houses than to attempt repairs. These houses have been completed and are now occupied. The farm has been well managed the past year, and has been improved, reflecting credit upon Mr. Fringer, the manager.

Mrs. Young, the matron, with her usual tact and skill, has made the school as homelike as possible for the boys. This has been appreciated by the Board.

It gives the Board pleasure to bear testimony to the faithful and conscientious manner in which the teachers have performed all the duties of teaching and directing the boys in their amusements and work out of school hours.

Yours very respectfully,

D. L. BARTLETT, *President.*

REPORT OF THE FINANCE COMMITTEE.

BALTIMORE, January 1, 1894.

To the Trustees of the
McDonogh Educational Fund and Institute:

GENTLEMEN:

The following is a statement of receipts and disbursements of the McDonogh Fund from January 1, 1893, to December 31, 1893.

RECEIPTS.

Cash on hand, as shown by last report	$ 3,634 20
Interest on city stocks	40,846 00
Interest on loan	33 83
Interest from Baltimore Trust and Guarantee Company	203 59
Royalty from stone quarry	414 60
Bills receivable—Note paid	1,000 00
Farm products	29 09
From the Samuel H. Tagart bequest	14,113 75
From the Treasurer of the Barnum bequest	1,670 07
	$61,945 13

Receipts brought forward			$61,945 13

DISBURSEMENTS.

Counsel fees in argument before Supreme Court—suit Baltimore *vs.* New Orleans		$ 500 00	
Gymnasium building—paid on account		12,200 00	
Two new cottages		2,341 98	
Insurance on buildings		20 00	
Western Maryland Railroad transportation		20 50	
Premium on Treasurer's bond		50 00	
Expenses of the trust		604 40	
Deposit with Baltimore Trust and Guarantee Co		203 59	
Expenses of exhibit at World's Fair		106 95	
Cleaning McDonogh Monument		55 00	
Gravestone and inscription for S. H. Tagart		52 00	
		$16,154 42	
Painting and repairs to old house	$ 577 93		
Painting gardener's house	35 00		
New ice-pond	252 35		
Work on new gymnasium	135 00		
New stable for school and garden	1,001 50		
Awnings, heaters, chandeliers, etc	376 30		
Additions to live stock	650 00		
Additions to farm implements	550 00		
Additions to household furniture	984 36		
New barn and wagon shed	156 99		
Trees and shrubbery	203 78		
Furniture from the Tagart estate	4,113 75		
		9,036 96	
For expenses of tuition	$5,770 28		
For expenses of house and lodging	5,394 57		
For expenses of subsistence	9,833 26		
For expenses of clothing	4,157 31		
For construction and repairs	674 27		
For medical attendance	284 34		
For library and school apparatus	163 06		
For office stationery	103 39		
For general expenses	359 16		
		26,739 64	
For Barnum wood shop	1,200 45		
For Barnum printing office	469 62		
		1,670 07	
			53,601 09
Balance of cash on hand			$8,344 04

INVESTMENTS.

The following statement shows how the McDonogh Fund is invested and the present value of the trust :

BALTIMORE CITY STOCK.

Funding Loan of 1900, interest at 6 per cent., payable January 1, April 1, July 1 and October 1	$ 85,200 00	
Jones' Falls Loan of 1900, interest at 5 per cent., payable February 1, May 1, August 1 and November 1	30,000 00	
City Hall Loan of 1902, interest at 6 per cent., payable January 1, April 1, July 1 and October 1	1,800 00	
Western Maryland Loan of 1902, interest at 6 per cent., payable January 1 and July 1	1,500 00	
Funding Loan of 1916, interest at 5 per cent., payable May 1 and November 1	310,000 00	
McDonogh Extension Loan of 1916, interest at 5 per cent., payable March 1 and September 1	280,000 00	
Internal Improvement Loan of 1928, interest at 3¼ per cent., payable January 1 and July 1	18,600 00	
Consolidated Loan of 1930, interest at 3½ per cent., payable January 1 and July 1	31,000 00	
		$758,100 00

REAL ESTATE.

McDonogh farm and improvements	$127,500 00	
Payments on account of real estate in Louisiana	11,685 75	
New school buildings	174,883 19	
New barn, stable, wagon-shed and water supply	9,942 03	
Gymnasium building	12,200 00	
New cottages	2,341 98	
		338,552 95
Amount carried forward		$1,096,652.95

Amount brought forward		$1,096,652.95
PERSONAL PROPERTY.		
Live stock on McDonogh farm	$4,300 00	
Household furniture and material	8,598 11	
Library, furniture and instruments	1,500 00	
Farm implements	2,200 00	
		16,598 11
Deposit with the Baltimore Trust and Guarantee Company		10,332 74
Amount of cash on hand		8,344 04
		$1,131,927 84
Deduct amount due to the Tagart bequest		14,113 75
Present value of the trust		$1,117,814 09

LOUISIANA PROPERTY.

In addition to the real estate, stocks, etc., already enumerated, the trust owns the following properties in the State of Louisiana:

LIVAUDAIS TRACT.

A one-half undivided interest with New Orleans to 177 arpents of land lying in the rear of the city of New Orleans, known as the "Livaudais Tract." The partition of this tract has never been made so as to ascertain the respective rights of the parties in and to the same, and the suit is still pending in regard to it. It is alleged New Orleans holds possession of a portion of this which belongs to Baltimore.

ST. BERNARD AND ORLEANS PARISHES.

A small tract in the rear of Versailles, parishes of St. Bernard and Orleans, bought in by Baltimore under a judgment in its favor at $280.

ST. BERNARD PARISH.

One hundred and eighty-five squares of ground in the rear of Versailles, parish of St. Bernard, sold in 1859 to W. Dunbar for $2,000; but not paid for.

NEW ORLEANS.

Twenty-four certain lots of ground situated in the city of New Orleans, in square known as Number 370,

bounded by Toulouse, White, St. Peter and Duprez streets, said property having been bought in by Baltimore at a tax sale, 5th of October, 1875, for $138.85, it having been sold for payment of taxes due by J. O. Theard, a debtor to Baltimore. Property assessed at $2,000.

BALANCE SHEET.

The books of account containing the various items embraced in the foregoing statements were duly balanced on 31st ultimo, and the committee now present for your examination a balance sheet of the trust ledger, showing the investments of the trust funds on January 1, 1894:

Dr. BALANCE SHEET. *Cr.*

Baltimore City Stocks.....	$758,100 00	McDonogh Trust Fund.	$1,117,814 09
McDonogh farm.....	127,500 00	Tagart bequest.....	14,113 75
Real estate, Louisiana....	11,685 75		
New school bulldings.....	174,883 19		
Barn, stable, water works.	9,942 03		
Gymnasium building.....	12,200 00		
New cottages.....	2,341 98		
Live stock on farm.....	4,300 00		
Household furniture.....	8,598 11		
Library and instruments.	1,500 00		
Farming implements.....	2,200 00		
BaltimoreTrust and Guarantee Company..	10,332 74		
Cash.....	8,344 04		
	$1,131,927 84		$1,131,927 84

Respectfully submitted,

DAVID L. BARTLETT,
GERMAN H. HUNT,
E. STANLEY GARY,
Finance Committee.

STATE OF MARYLAND, *City of Baltimore, sct:*

I hereby certify that on this 6th day of January, A.D. 1894, personally appeared before me, a Justice of the Peace in and for the city and State aforesaid, David L. Bartlett, President of the Board of Trustees of the McDonogh Educational Fund and Institute; German H. Hunt, the Vice-president thereof, and E. Stanley Gary, one of the trustees thereof, and did each make oath in due form of law that the matters stated in the foregoing reports are true, to the best of their knowledge and belief.

Sworn before

THOMAS C. BAILEY, *Justice of the Peace.*

THE ZENUS BARNUM BEQUEST.

BALTIMORE, January 1, 1894.

To the Board of Trustees of the
McDonogh Educational Fund and Institute:

GENTLEMEN:

The undersigned, treasurer of the fund created by the will of Zenus Barnum, deceased, hereby reports that the receipts and disbursements from January 1, 1893, to January 1, 1894, have been as follows:

RECEIPTS,

Cash on hand, as shown by last report	$ 4,058 89
Ground rent	150 00
Dividends	208 80
Coupons paid	2,535 00
Interest on city stock	1,470 00
Interest on Baltimore and Ohio Railroad preferred stock	150 00
Interest on note—Mayor and City Council	102 50
Mayor and City Council—note paid	5,000 00
Bond of City of Lynchburg No. 74, "called"	1,000 00
	$14,675 19

DISBURSEMENTS.

$2,000 Georgia Pacific Railroad first mortgage bonds	$1,845 00	
Loaned Mayor and City Council on note	5,000 00	
Expenses of Virginia property, near Culpeper	83 90	
Bought gas engine for use of shops	450 00	
Expenses of Barnum shops	$1,200 45	
Expenses of printing office	469 62	
	1,670 67	
		9,048 97
Balance of cash on hand		$5,626 22

INVESTMENTS.

The following is a list of the securities now held for the benefit of this bequest:

$30,000 Baltimore City Stock of 1939, interest at 3½ per cent., payable January 1 and July 1.

7,000 Baltimore City Stock of 1900, interest at 6 per cent., payable quarterly.

8,000 Georgia, Carolina and Northern Railroad Bonds, due 1929, interest at 5 per cent.

6,000 Virginia and Tennessee Railroad Bonds, due 1900, interest at 8 per cent.

8,000 Georgia Pacific Railroad Bonds, due 1922, interest at 6 per cent.

5,000 Ohio and Mississippi Railroad Bonds, Springfield Division, due 1905, interest at 7 per cent.

5,000 Louisville, Evansville and St. Louis Railroad Bonds, due 1939, interest at 5 per cent.

4,000 City of Lynchburg Bonds, due 1916, interest at 5 per cent.

5,000 Town of Salem, N. C. Bonds, interest at 5 per cent.

3,000 Western Maryland Railroad Bonds, guaranteed, due 1900, interest at 6 per cent.

3,000 Northern Central Railroad Bonds, due 1900, interest at 6 per cent.

1,000 Pittsburgh and Connellsville Railroad Bonds, due 1898, interest at 7 per cent.

80 Shares Maryland Fire Insurance Company stock, par $5.

25 Shares Baltimore and Ohio Preferred Stock, par $100.

60 Shares Firemen's Insurance Company of Baltimore Stock, par 18.
6 Shares Girard Fire and Marine Insurance Company of Philadelphia Stock, par $100.

In addition to the stocks and bonds above enumerated the trust owns a sub-ground-rent on property on Fort avenue, Baltimore, yielding $300 per annum.

Respectfully,

D. L. BARTLETT, *Treasurer*.

The Samuel H. Tagart Bequest.

Baltimore, January 1, 1894.

To the Trustees of the
McDonogh Educational Fund and Institute:

Gentlemen:

The undersigned, treasurer of the fund created by the will of Samuel H. Tagart, deceased, hereby reports that the receipts and disbursements from December 5, 1892, to January 1, 1894, have been as follows:

RECEIPTS.

From S. Tagart Steele, executor	$ 9,853 88	
Furniture, at appraised valuation	4,113 75	
	$13,967 63	
Less collateral tax on real estate	3,352 73	
		$10,614 90
Sales of wheat		659 13
Sale of house No. 6 W. Madison street to James Sloan, Jr		35,000 00
Sale of lot adjoining 834 Park avenue to Fred. C. Heighe		8,000 00
Sale of Garrison farm to C. J. Moore, cash	$15,200 00	15,200 00
Mortgage notes	$17,600 00	
Sale of Rockland farm to W. Fell Johnson, cash	$12,250 00	12,250 00
Mortgage notes	$16,000 00	
Rents from Rockland property		892 38
Rents from Brooklandville property		244 55
Rents from Courtland-street property		103 35
Ground rents		2,577 43
Coupons		2,775 00
Interest from Baltimore Trust and Guarantee Company		107 66
		$88,424 40

Receipts brought forward	$88,424 40

DISBURSEMENTS.

Bought sundry bonds, namely:		
$9,000 City of Cumberland, 5 per cent	$ 9,675 00	
5,000 City of Bristol, Tenn., 6 per cent	5,077 50	
10,000 City of Atlanta, Ga., 4½ per cent	10,350 00	
5,000 City of Savannah, Ga., 5 per cent	5,125 00	
10,000 Town of Salem, N. C., 5 per cent	10,037 93	
10,000 Baltimore Traction Company, 6 per cent.	10,222 50	
5,000 Baltimore City Passenger Railway Company, 5 per cent	5,625 00	
Paid assessment on $5,000 Richmond and Manchester Railway Bonds	937 50	
Paid Mayor and City Council in adjusting sale of Rockland farm	1,480 31	
Paid J. W. Linton, commissions on sale of Rockland and Garrison farms	2,937 50	
Paid Edward Cowling for erection of house at Brooklandville	1,016 00	
Repairs, 421 Courtland street	49 88	
Paid Louisa C. Taylor, ground rent on house 421 Courtland street	69 00	
Abstracts of title to property	200 00	
Surveys and maps of property	220 00	
Recording, insurance, taxes, stationery	29 76	
Perpetual policy insuring memorial window in St. Thomas' Church	125 00	
Box rent, Baltimore Trust and Guarantee Company.	25 00	
Annuity—three quarterly payments:		
To Sally Hathaway	112 50	
To Martha Ann Tucker	112 50	
	$63,427 88	
Loan to Trustees of McDonogh Fund	$10,000 00	
Furniture taken at appraised value	4,113 75	
	14,113 95	
Baltimore Trust and Guarantee Co.—deposit	10,649 98	
		88,191 61
Balance, cash in bank		$232 79

INVESTMENTS.

The following is a list of the securities now held for the benefit of this bequest:

BONDS.

$9,000 City of Cumberland, Md., 5 per cent., 1922.
5,000 City of Bristol, Tenn., 6 per cent., 1922.
10,000 City of Atlanta, Ga., 4½ per cent., 1922.
5,000 City of Savannah, Ga., 5 per cent., 1909.
10,000 Town of Salem, N. C., 6 per cent., 1931.
10,000 Baltimore Traction Company, 6 per cent., 1901.
5,000 Baltimore City Passenger Railway Company, 5 per cent., 1911.

GROUND RENTS.

$2,739.06 on thirty-six pieces of property.

LEASEHOLD PROPERTY.

House No. 421 Courtland street, ground rent $138 per annum.

BRUSH ELECTRIC LIGHT COMPANY.

50 Shares Preferred Stock.

PERPETUAL POLICY OF INSURANCE.

$125 Baltimore Equitable Society.

BILLS RECEIVABLE.

$17,600 C. J. Moore, on mortgage at 5 per cent., interest payable semi-annually.
$16,000 W. Fell Johnson, on mortgage at 5 cent., interest payable semi-annually.

Respectfully,

DAVID L. BARTLETT,
Treasurer.

UNIV. OF MD COLLEGE PARK

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N. MANCHESTER, INDIANA